

Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS

CQ-DFX666LEN

CQ-DFX444LEN/GLEN



High-Power CD Player / RDS Receiver with Changer Control



< CQ-DFX666LEN >

Specifications*

General

Power Supply	: DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground
Tone Controls	: Bass ; ± 12 dB at 100Hz Treble ; ± 12 dB at 10kHz
Current Consumption	: Less than 2.5A (CD mode, 0.5W 4-Speaker)
Maximum Power Output	: 40W $\times 4$ (at 4 Ω)
Per-AMP Output	: 20W $\times 4$ (DIN45 324, at 4 Ω)
Speaker Impedance	: 4-8 Ω
PRE-OUT output Voltage	: 2V
PRE-OUT output impedance	: 600 Ω

FM Stereo Radio

Frequency Range	: 87.5 - 108MHz
Usable Sensitivity	: 6dB/ μ V(S/N 30dB)

MW Radio

Frequency Range	: 531 - 1,602kHz
Usable Sensitivity	: 28dB/ μ V(S/N 20dB)

LW Radio

Frequency Range	: 153 - 279kHz
Usable Sensitivity	: 32dB/ μ V(S/N 20dB)

CD Player

Sampling Frequency	: 8 times oversampling
DA Converter	: 1bit DAC System
Pick-Up Type	: 3-beam
Light Source	: Semiconductor laser
Wavelength	: 780nm
Frequency Response	: 20Hz to 20,000Hz (± 1 dB)
Signal to Noise Ratio	: 96dB
Wow and Flutter	: Below measurable limits
Channel Separation	: 75dB

Dimensions**

: 178(W) $\times$ 50(H) $\times$ 150(D)mm

Weight**

: 1.6kg

- * Specifications and the design are subject to possible modification without notice due to improvements
- ** Dimensions and Weight shown are approximate.

Panasonic

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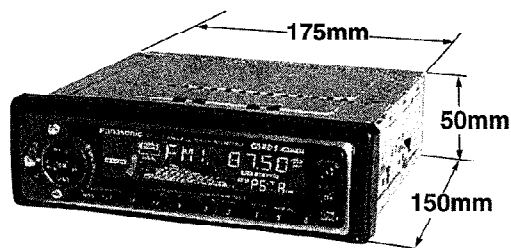
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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DIMENSIONS



FEATURES

- 8bit-times oversampling 1bit DAC system.
- Digital servo for reliable playback.
- PLL (Phase Locked Loop) synthesized tuning.
- 18-FM, 6-AM presets with preset scan.
- Intelligent volume control.
- Removable face plate.
- CD changer control.

FUSE

Be sure to use a fuse of the specified rating (15A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

MAINTENANCE

To clean the exterior of this unit, use a soft cloth to wipe the surface. Do not use benzine, thinner, or any other type of solvents.

RADIO ALIGNMENT

Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

CD DECK ALIGNMENT

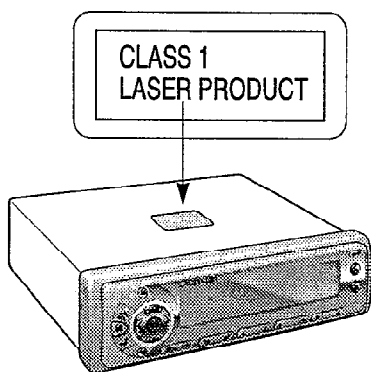
This model has no servo alignment points because microcomputer controls the servo circuit.

Note:
 This operating instruction manual is for three models CQ-DFX666LEN, CQ-DFX444GLEN and CQ-DFX444LEN.
 The differences among these models' are mentioned below. All illustrations throughout this manual represent model CQ-DFX666LEN unless otherwise specified.

Items	MODEL	CQ-DFX666LEN	CQ-DFX444GLEN	CQ-DFX444LEN
LCD Color		Multi	Green	Blue
S + HDB		Yes	None	None
Tone Enhancement		None	Yes	Yes

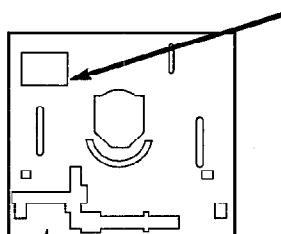
- Label Indications and Their Locations
- Warnetiketten und deren Anbringensort
- Indications portées les étiquettes et emplacement

- APPAREIL À LASER DE CLASSE 1
- KLASS 1 LASER APPARAT
- LUOKAN 1 LASERPLAITE



VORSICHT!

UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET IST, NICHT DEM LASERSTRAHL AUSSETZEN.



DANGER! Invisible laser radiation when open. Avoid direct exposure to beam.
ADVARSEL! Usynligt laserlys udsirales ved åbning. Undgå direkte bestråling.
VARO! Avattessa ja suojalukitus ohitettessa olet alttiina näkymättömälle lasersträilylle. Älä kasto silmiesi.
VARNING! Osynlig laserstrålning när denna del är öppen och spårren är urkopplad. Beträkta ej strålen.
ADVERSEL! Usynlig laserstrålning når deksel åpnes og sikkerhedsås brytes. Undgå eksponering for strålen.

- Caution Mark
- Warnzeichen
- Marque d'avertissement
- Waarschuwingsteken
- Varningsmärke
- Marca di precauzione
- Marka de advertencia

- Deck Ass'y (Upper Side)
- Geräteansicht (Oberseite)
- Assemblage de la table lecture (Côté supérieur)
- Dekkbevestig (Bovenkant)
- Däcksenhät (Topp)
- Gruppo della piastra (Lato superiore)
- Conjunto de la platina (Lado superior)

Laser Products

Caution:
This product utilizes a laser.
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser products:
Wave Length 780 nm
Laser Power No hazardous radiation is emitted with safety protection.

Do not take apart this unit or attempt to make any changes yourself.
This unit is a very intricate device that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

ISO-Anschlußschema

- Die Verdrahtung des mitgelieferten Stromkabels entspricht der Anordnung der normalen ISO-Steckverbinder.
- Bei einigen Autotypen kann es vorkommen, daß die Verdrahtung anders als die aus der Tabelle 1 ersichtlichen ISO-Anordnung ist, obwohl ISO-Steckverbinder verwendet werden.

Tabelle 1

Abb. 1, Spalte Nr.	A4	A7
Auto für normale ISO-Anordnung	Batterie (ständige 12V-Stromversorgung)	"IGN" oder "ACC" (umgeschaltete 12V-Stromversorgung)
Beispiel Auto A	"IGN" oder "ACC" (umgeschaltete 12V-Stromversorgung)	Batterie (ständige 12V-Stromversorgung)
Beispiel Auto B	Kein Anschluß	Batterie (ständige 12V-Stromversorgung)

- Die Daten überprüfen, um sicherzustellen, daß die Anordnung der ISO-Steckverbinder auf der Autoseite die gleiche ist wie die normale ISO-Anordnung (Tabelle 1, Abb. 1).
- Im Falle der Anordnung für Auto A oder B die Anschlüsse der rot/gelben Kabel am Übertragungs-Steckverbinderblock (*) gemäß Abb. 1 ändern.

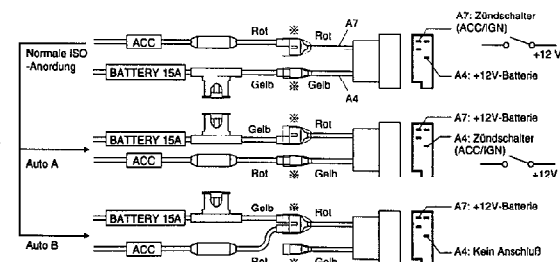
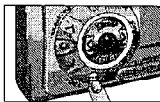
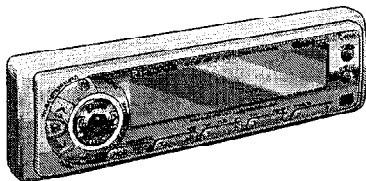


Abb. 1

- Nach der Verkabelung sollte unbedingt der durch * gekennzeichnete Teil mit Hilfe von Isolierbändern o.ä. isoliert werden.

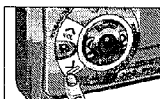
Power and Sound Controls



Power

If the car is not running yet, turn the key in the ignition until the accessory indicator lights.
Press PWR to switch on the power.
Press and hold PWR again to switch off the power.
Note: When power is switched on for the first time, demonstration is displayed appears. To cancel this display, press D (DISP/CT).

FM: 87.50



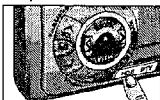
Volume

Press VOL Δ or VOL ∇ to increase or decrease the volume.

VOL 20 Volume Level
0 to 40

Press VOL Δ or VOL ∇ for more than 0.5 second to sequentially change numeric levels on the display.

<Only for CQ-DFX666LEN>



S-HDB (Super High Definition Bass)

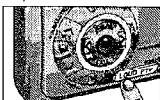
(Only for CQ-DFX666LEN)

Especially for rock music, the bass-sound will be more powerful.
• Press HDB to be able to listen to high-definition bass.

HDB

• Press HDB again to cancel.

<Only for CQ-DFX444G/DFX444LEN>



Tone Enhancement

(Only for CQ-DFX444G/DFX444LEN)

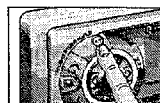
• Press TONE to enhance bass and treble tones when listening at low or medium volume.

TONE

• Press TONE again to cancel.

Note: This unit is equipped with anti-volume-blast circuit which serves as an automatic volume level adjuster so that you will not be deafened with sudden loud sound. This system operates as follows. When PWR is first pressed to switch on, the volume level is low. After that, the volume level gradually returns to the level as the same as the one before turning off. Anti-volume-blast circuit is not effective when the volume level is lower than position 20 at the display.

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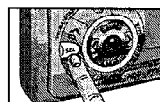


Attenuator

• Press ATT to decrease volume to about 1/10 of the previous level.

ATT

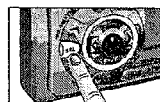
• Press ATT again to cancel.



Changing Audio Modes

Press SEL to switch the audio mode in the following order.

Normal Mode $\rightarrow$ VOL $\rightarrow$ BAS $\rightarrow$ TRE $\rightarrow$ BAL $\rightarrow$ FAD



Bass and Treble

Press SEL to select the BASS (TREBLE) mode. Press VOL Δ or VOL ∇ to increase or decrease the bass (treble) response.

BAS+ 30 TRE+ 30
-12 to +12 -12 to +12



Balance

Press SEL to select the BALANCE mode. Press VOL Δ or VOL ∇ to shift the sound volume to the right or left speakers.

BAL L 2 BAL CNT BAL R 2
1 to 15 Balance Center 1 to 15

Fader

Press SEL to select the FADER mode. Press VOL Δ or VOL ∇ to shift the sound volume to the front or rear speakers.

FAD F 3 FAD CNT FAD R 3
1 to 15 Fader Center 1 to 15

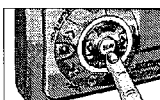
Note: When an audio mode (BAS/TRE/BAL/FAD) is selected but no operation is made within 5 seconds (2 seconds at VOL mode), the display will return to the normal operation mode. In such a case, press SEL again to select the control mode.

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Power and Sound Controls continued

Sound Design Memory

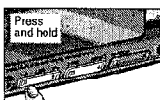
A favorite level setting of each audio mode (except for VOL and ATT) can be memorized and recalled.



Sound Design Memory Mode Selection

Press SDM to select the sound design memory mode.

SOUND



Sound Design Memory Input

To preset a favorite level setting, press and hold the corresponding preset memory button (1 to 4) in sound design memory mode until the display blinks.

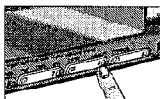
SOUND 4

Preset buttons 5 and 6 are set as follows and they can not be changed.

Preset button 5: recommendable sound setting

Preset button 6: BASS, TRE.....0dB

BAL, FAD.....center



Sound Design Memory Call

When a desired preset memory button is pressed in sound design memory mode, the corresponding sound setting is recalled.

SOUND 4 The called preset number is displayed.



Canceling of Sound Design Memory Mode

Press SDM to change to the normal mode.

Note: When the sound design memory mode is selected but no operation is made within 5 seconds, the mode will return to the regular mode.

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Display Controls



Dimmer Switching

Press and hold (LEVEL/DIM) for more than 1 second to change the brightness of the LCD from one level to another in a cycle of 3 levels as follows.

Dimmer 1 (Bright) $\rightarrow$ Dimmer 2 (Medium) $\rightarrow$ Dimmer 3 (Dark)



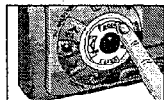
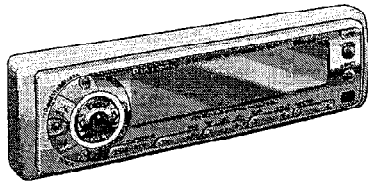
Level Meter Display Switching

Press (LEVEL/DIM) to change the level meter display from one level meter display to another in a cycle of 6 kinds.

PATTERN 1 $\rightarrow$ PATTERN 2 $\rightarrow$ PATTERN 3
PATTERN OFF $\leftarrow$ PATTERN 5 $\leftarrow$ PATTERN 4

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Radio Basics

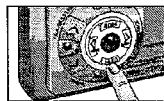


To change to Tuner Mode

Press MODE to switch the operation mode as follows.

Tuner → CD → (CD Changer Control)

FM1 87.50



Selecting a Band

Press BAND to select the bands as follows.
"STEREO" indicator lights if the station is broadcasting in stereo.

FM1 → FM2 → FM3 → AM(LW/MW)



Manual Tuning

Press < or > to move to a lower or higher frequency.

FM1 87.50

Press and hold < or > to move to a lower or higher frequency rapidly.

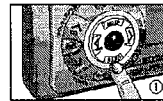


Seek Tuning

Press and hold < or > for more than 0.5 second, then release. The radio automatically stops at the next station.

Preset Station Setting

FM1, FM2, FM3 and AM (LW/MW) can save maximum 6 stations each in their preset station memories.



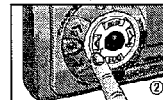
Manual Station Preset

- Press BAND to select a desired band.
- Use manual or seek tuning to find a station that you want to save into memory.
- Press and hold one of the preset buttons 1 to 6 for more than 2 seconds until the display blinks. Repeat the process to set other stations for the FM1 to AM bands.

FM1 87.50

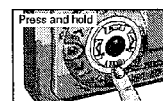
Preset Channel Indicator

Note: You can change the memory setting by repeating the above procedure.



Tuning in a Preset Station

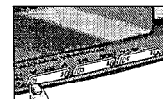
Press any of the buttons 1 to 6 to tune in the station preset.



Auto Station Preset

Select a band, press and hold BAND (AUTO-P) for more than 2 seconds.

- The 6 strongest available stations will be automatically set in memory on preset buttons 1 to 6.
- Once set, the preset stations are sequentially scanned for 5 seconds each.



- Press the appropriate preset button for the station you want to listen to.

Caution: For safety reasons, do not attempt to program while driving.

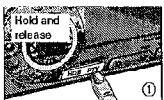
16

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Radio Basics continued

MONO/LOCAL Selection

- Much interference is reduced during a weak FM stereo broadcasts when MONO is on. (Only for FM mode)
- Searching stops automatically at a strong wave station only when LOCAL is on.

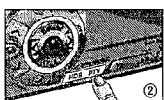


① During FM broadcasts

Press and hold PTY (MONO/LOC) to switch the mode as follows. Release your finger at the desired mode.

MONO OFF → MONO ON → MONO ON → MONO OFF

LOCAL OFF → LOCAL ON → LOCAL ON → LOCAL OFF



② During AM broadcasts

Press PTY (MONO/LOC) on or off the LOC mode as follows.

LOCAL OFF → LOCAL ON

RDS (Radio Data System) Reception

Many FM stations are broadcasting added data compatible with RDS. This radio set offers convenient functions using such data.

AF (Alternative Frequency)

When receiving condition becomes poor, an RDS station with the same program will be automatically selected.

EON (Enhanced Other Networks)

When EON data is received, the EON indicator lights and the TA and AF functions are expanded.

TA: Traffic information from not only the station now tuned in but also other stations of the same network can be received.

AF: The frequency list of the RDS stations preset by received EON data is updated.

PS (Program Service Name)

When an RDS station is received, the RDS indicator lights and automatically displays the name of that station instead of the frequency. When D (DISP/CT) is pressed during PS display, the frequency is displayed for 3 seconds, then PS display returns.

PI (Program Identification)

If a preset RDS station is poor in receiving condition when it is selected, the automatic seek (PI Seek) starts to seek the same program and tune in to it.

PTY (Program Type)

Program type identification signal
Example: News, rock, classical music, etc.

TA (Traffic Announcement)

When an FM station that periodically provides the latest traffic information is received, the TP indicator lights. If TA ON is set, FM traffic information automatically interrupts your listening to a CD, CD changer until it ends, then you will listen again to whatever you have been listening to.

Best Station Research

If a preset RDS station is in poor condition of reception when you try to tune in to it, the best frequency is selected from the AF list of that station.

REG (Region)

The AF, Best Station Research, PI Seek functions will be as follows:

REG ON: The frequency changes only with the same regional program. This function is mainly used while driving in the same area, for example, in a city.

REG OFF: The frequency changes even with a different regional program if the station is in the same network. The broadcast may be different depending on the case. This function is mainly used when driving far from one region to another.

WHAT PROVIDES EON CAPABILITIES

EON lets the radio set take advantage of RDS information much more than before. It constantly updates the AF list of all presets, including the station currently tuned in to. So, even if you change preset far from home, you will be able to receive the same station at an alternative frequency, or another station serving the same program if any. EON also keeps track of locally available TP stations for quick reception.

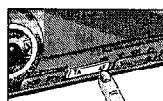
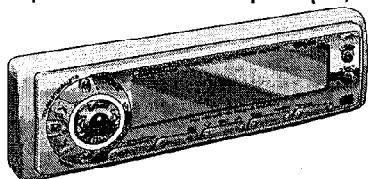
Note: When you're in "AF ON" mode, auto preset memory only works for RDS stations. When in "TA on" mode, it only works for TP stations. To make auto preset for ordinary stations, cancel AF mode and switch to TA off in advance.

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RDS (Radio Data System) Reception continued

A. Basic Operation in RDS Reception (PS, AF, CT, PI)

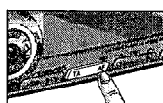


RDS Reception

Press AF when receiving a station in the FM1, FM2 or FM3 band.
• The operating mode changes to AF ON or AF OFF, respectively.



- Select AF ON if you wish to use the AF network of an RDS station. Best station research is activated at the same time.
- Select AF OFF if the AF network of an RDS station is not necessary.



To Change AF Mode

Press AF to change AF ON and activate Best Station Research at the same time. (3 seconds maximum)



.....AF 1 Mode



.....AF 2 Mode

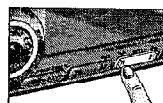


.....AF OFF Mode

Note:

1. Default mode is AF1.
2. AF1 has a low level of AF operating sensitivity in urban areas. Therefore, AF does not frequently operate even if sensitivity is temporarily lowered between skyscrapers, for example.
3. AF2 is for suburban areas with a higher level of sensitivity than AF1.

For Seek Tuning, RDS Station Preset, Tuning in a RDS preset station, and Auto RDS Station Preset, please refer to Radio Basics (page 16 to 18).



RDS seek tuning (PI seek)

The PI seek function may be used if an RDS station selected from the memory is poor in receiving condition. Press the preset button again for the station now tuned in to.



PI Seek: If Best Station Research fails in selecting the best station, the PI seek function operates to automatically tune in to the same program.



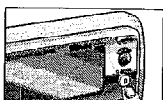
Region (REG) Switching

Press and hold AF(REG) for more than 2 seconds in AF mode to alternately select REG ON and REG OFF.



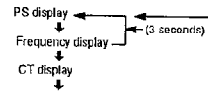
Note:

If you wish to stay with the same program, keep REG ON. If you keep REG OFF, there is a higher possibility of returning in to an AF station in better receiving condition. The relationship of the PI seek function with REG ON and REG OFF is as described above.



Changing Display

Press D(DISP/CT) to change the display.
(Frequency display continues for only 3 seconds, returning to PS display after that)



Clock Time (CT) System

The CT (24-hour) system may not properly operate in areas where RDS CT service is not available. Once CT service is received, the CT system keeps operating. 'NO CT' is displayed in areas where no CT service is available.



Clock Display

Press D (DISP/CT) to indicate the clock display.

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RDS (Radio Data System) Reception continued

B. TP Reception



Initial Time Setting

Press BAND to change to AM mode.

- ① Press D(DISP/CT) "NO CT" is displayed.
- ② Press and hold D(DISP/CT) again for more than 2 seconds "hour" blinks indicating the time setting mode is activated.
- ③ To set hour, press < or >.
- ④ Press D(DISP/CT) again for minutes setting.
- ⑤ To set minutes, press < or >.
- ⑥ Hold < or > change numbers rapidly.
- ⑦ After setting set the time, press D(DISP/CT).



Note:

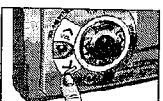
- If CT display is kept on, it remains on even if PWR and ACC are turned off and back on again.
- In other modes, press D (DISP/CT) to get RDS CT-service.

B. TP Reception



Select traffic information (TA on) mode

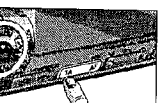
Press TA to switch on and keep it there when you wish to listen to traffic information. Press TA to switch off, to cancel.



Volume Setting (Only for TA on mode)

Adjust the volume as desired using "VOL+" or "VOL-" while receiving traffic announcement (TA).

After volume for traffic announcement (TA) is set, the difference between normal volume and TA volume is automatically stored in the memory (up to 5 levels) so that next traffic information will be received at the preceding TA volume which may be higher or lower than normal volume. Normal volume can be changed up to 5 levels upward or downward. If an adjusted level of volume is over 40 or less than 0, any further change will not be made.



When receiving a station other than TP station (including EON stations) a traffic information station is automatically searched for and the radio automatically stops the next available TP station. EON Capabilities: EON lets the radio take advantage of much more RDS information than before. It constantly updates the AF lists for all switch presets far from home, you will receive an alternative frequency for the same station, or another station carrying the same program, when such exists, EON also keeps track of locally available TP station.



Press TA.



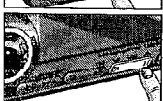
TP Seek Tuning

Press < or > for more than 0.5 second, then release. The radio automatically stops at the next available TP station.



Auto TP Station Preset

Press and hold BAND (AUTO-P) for more than 2 seconds. The six strongest available TP stations are automatically set in memory on the preset button 1 to 6. Once set, this preset stations are sequentially scanned for 5 seconds each.



Tuning in a TP station preset

Press any of the preset buttons 1 to 6 that you want to listen to. And then Best Station Research function is activated to automatically select the strongest available frequency for the TP station (through the built-in frequency) lists, if reception is weak.



Muting TA on

Press and hold TA for more than 2 seconds to light "TA on". Then Traffic Announcement (TA) function is activated to operate, allowing you to listen to only Traffic Program whenever it is available.

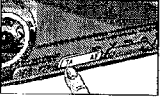
Muting TA on canceling (Muting TA on → TA on)

Press TA again.
Or press VOL+ to increase the volume level.



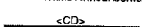
TP Auto Search

If receiving conditions are poor when TA is on during muting and if there is no other alternative frequency in the same network, a traffic announcement station in good receiving condition is automatically searched for.



CD/CD-C TA on

Press TA during CD, CD changer mode.
When TA on mode is selected while listening to the source in that mode, wait for traffic announcement to begin.



Traffic information

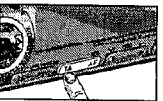


End

Switching to TA off Mode

Select either one of the following steps.

- Press TA when TA is on
- Press and hold TA for more than 2 seconds when Muting TA is on.
- Press TA when CD/CD-C TA is on.



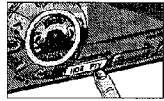
22

23

RDS (Radio Data System) Reception continued

C. PTY Reception

(There are some areas where PTY service may not be available.)



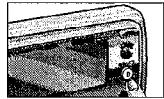
Switching to PTY mode

Press PTY to select PTY display mode, and the PTY of the broadcast now received is displayed.

CLASSICS

"NO PTY" is displayed if there is no corresponding program type.

NO PTY



Changing PTY Display Language

Press D (DISP) in PTY mode to alternate the language between English and Swedish.

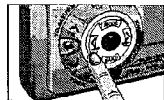
Press D (DISP).

NEWS

English

ONHETER

Swedish



Program Type Selection

Press < or > to select the program type as follows.

SPEECH - MUSIC - NEWS - AFFAIRS - INFO - SPORT - EDUCATE - DRAMA
ROCK M - POP M - VARIOUS - SCIENCE - CULTURES
M.O.R.M - LIGHT M - CLASSICS - OTHER M - WEATHER - FINANCE
LEISURE - TRAVEL - PHONE IN - RELIGION - DUAL A - CHILDREN
JAZZ - COUNTRY - NATIONAL - OLDIES - FOLK M - DOCUMENT

When a desired selection has been made, press BAND. Then automatic seek will start to tune into the station broadcasting the selected program type.

Note:

Seek tuning does not operate as long as "NO PTY" is displayed.



TABLE of PTY CODE and Program Type
Press any of the preset button 1 to 6 that you want to desire the program type. Those buttons are already stored program types as follows. (Default setting)

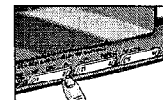
<PRESET PTY>

Preset NO.	1	2	3	4	5	6
Program Type	NEWS	SPEECH	SPORTS	POP MUSIC	CLASSICS	MUSIC
Display	NEWS	SPEECH	SPORT	POP M	CLASSICS	MUSIC
	NEWS	AFFAIRS INFO EDUCATE DRAMA CULTURES SCIENCE VARIED WEATHER FINANCE CHILDREN SOCIAL A RELIGION PHONE IN TRAVEL LEISURE DOCUMENT	SPORT	POP M	CLASSICS	ROCK M M.O.R.M LIGHT M OTHER M JAZZ COUNTRY NATIONAL OLDIES FOLK M



Program Type Preset

Press and hold one of the buttons 1 to 6 for more than 2 seconds to preset the desired program type selection in that button.



Tuning in a PTY Preset Station

Press any of the preset buttons 1 to 6 that you want to listen to.

RDS (Radio Data System) Reception continued



Searching for PTY

① Select the desired station from among those preset in the preset number buttons 1 to 6. Then, the preset PTY and that preset number are displayed for 5 seconds.

POP

Press preset button.

NEWS

② While the desired type from 6 presets is displayed, take either of the following two steps.

- Press the same preset button again.
- Press BAND.

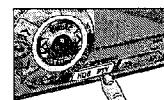
If the desired PTY station is available, it is directly received. If it is not, "NO PTY" blinks and the radio returns to the station that was received before the search.

NEWS

Press the same preset button.

NEWS

Press the same button again to cancel.



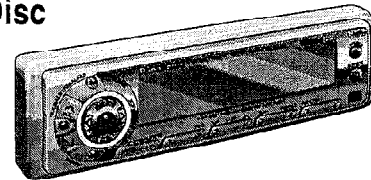
Canceling of PTY Mode

Press PTY to cancel. The set returns to the state existing before PTY mode while the receiving frequency remains unchanged.

Emergency Announcement Reception

(Some areas are not covered by emergency announcement service.)
If an emergency announcement is broadcast during muting TA ON/CD/CD changer mode, the radio is automatically selected to receive the emergency announcement. "ALARM" blinks.

Compact Disc Player Basics



Caution: Only 12 cm CD is available for this unit.



Mode Selection

While the disc is inserted, press MODE to switch the operation mode as follows.

Tuner — CD — (CD Changer Control)



To start the CD Player

- Press OPEN to open the front panel.
- With the label side up, insert the disc and playback starts automatically.
- Close the front panel by hand.

Caution: When the front panel is opened, do not force it down and do not put anything on it since those may result in damage to the unit.

Note: While inserting CD, the volume decreases about 1/10 of the previous level. And the volume is back to the previous level when the front panel is closed completely.

Note: While the disc is inserted, "CD" indicator will light.

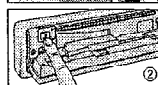


Stopping and Ejecting a Disc

- Press OPEN to open the front panel.
- Press EJECT to stop CD play, and the disc will quietly eject from the CD slot.

Caution: When ejecting CD, do not close the front panel until CD is ejected and removed from the CD slot completely.

Note: While ejecting CD, the volume decrease about 1/10 of the previous level. And the volume is back to the previous level when the front panel is closed completely.



Compact Disc Player Basics continued



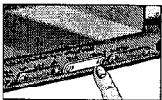
Selecting a Track

- Press **▶** once to go to the next track.
- Press **◀** once to play from the beginning of the track you are listening to. Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.



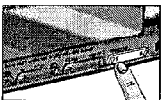
Searching a Track

- Press and hold **◀** or **▶** for more than 0.5 second to activate reverse through or fast forward a track.
- Release **◀** or **▶** to resume the normal CD play.



Repeating a Track

- Press 4 (REPEAT) to repeat the current selection.
- Press 4 (REPEAT) again to cancel.



Random Selection

- Press 5 (RANDOM). A random selection of music is played from all available tracks.
- Press 5 (RANDOM) again to cancel.



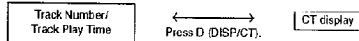
Scanning a Disc

- Press 3 (SCAN). The display will blink and the first 10 seconds of each track on the disc play in order.
- Press 3 (SCAN) again to cancel.



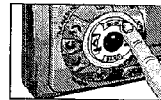
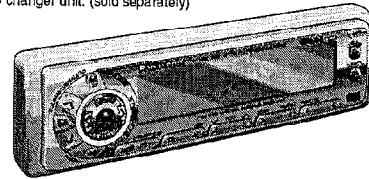
Changing the Display

Press D (DISP/CT) to switch the display in sequence as follows.



CD Changer Basics

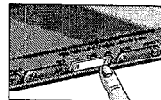
Note:
CD changer functions are applicable to units with optional CD changer unit. (sold separately)



To start the CD Changer

While CD changer is connected, press MODE to change into the CD changer mode and playback starts automatically.

CD 1-0 1

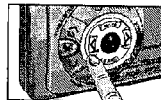


Selecting a Disc

Press **√**DISC or DISC $\wedge$ to select discs in descending or ascending order.

CD 3-0 1

Then, the selected disc will start to play from the first track.



Selecting a Track

- Press **▶** once to go to the next track.
- Press **◀** once to play from the beginning of the current track. Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.



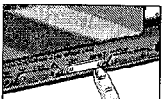
Searching a Track

- Press and hold **◀** or **▶** for more than 0.5 second to activate reverse through or fast forward a track.
- Release **◀** or **▶** to resume the normal CD play.

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CD Changer Basics continued



Repeating a Track

- Press 4 (REPEAT) to repeat the current selection.
- Press 4 (REPEAT) again to cancel.



Random Selection

- Press 5 (RANDOM). A random selection of music is played from all available tracks.
- Press 5 (RANDOM) again to cancel.

Note:
The "√DISC" or "DISC $\wedge$ " is operated, has priority over Random Play mode. The Random mode will stop and the disc select function will operate once the "√DISC" or "DISC $\wedge$ " is pressed.



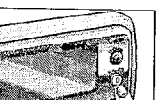
Scanning Tracks

- Press 3 (SCAN). The display blinks and the first 10 seconds of each track on the disc play in sequence.
- Press 3 (SCAN) again to cancel.



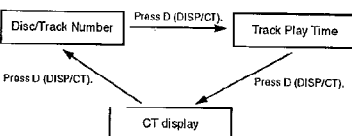
Scanning Discs

- Press and hold 3 (SCAN) for more than 2 seconds. The 1st track of all the discs in the magazine is played for 10 seconds each.
- Press 3 (SCAN) again to cancel.



Changing the Display

Press D (DISP/CT) to switch the display as follows.



Error Display Messages for CD/CD Changer

E1	Displays when the compact disc is dirty or upside down. The disc eject automatically.
E2	Displays when compact disc is scratched. The disc eject automatically.
E3	Displays when the compact disc stops operating for some reason. Please eject the CD. If the error message E3 is still displayed, please turn off the car engine (ACC off) and remove the fuse from yellow lead for 1 minute. Then reinstall the fuse.
0000	Displays when there is no disc in the magazine.

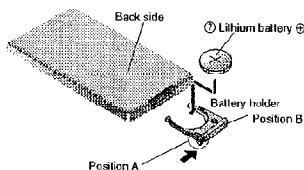
30

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Remote Control Basics

Battery Replacement:

1. Remove the battery holder.
Pull the holder by the Position B while pushing Position A in the direction indicated by the arrow.
2. Replace the battery.
Set a new battery properly with (+) side up as illustrated.
3. Insert the battery holder.
Push in the holder to the original position.



Note on Batteries:

Old batteries must immediately be removed and disposed.

Battery Information:

- Designated Battery: Panasonic Lithium Battery (CR2025)
- Battery Life: 6 months with normal use (in normal room temperature)

Caution:
Improper use of batteries may cause overheating, explosion or ignition, resulting in injury or fire.
Battery leakage may cause damage to the unit.

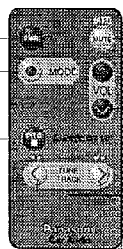
- Do not disassemble or short the batteries. Do not throw the batteries into a fire.
- To avoid the risk of accident, keep the batteries out of reach of children.

Names of Main Controls:

Power Button
(Refer to page 12.)

Mode Button
(Refer to page 16, 27, 29.)

Band/Disc up Button
(Refer to page 16, 29.)



ATT Button
(Refer to page 13.)

Volume Control Button
(Refer to page 12.)

TUNE/TRACK Fast
Forward/Backward Button
(Refer to page 16, 28, 29.)

Anti-Theft System

This unit is equipped with a removable face plate. By removing this face plate, the radio becomes totally inoperable. The security indicator will blink.

To Remove the Removable Face Plate

- ① Switch off the power.
- ② Press the OPEN. The removable face plate will be opened.

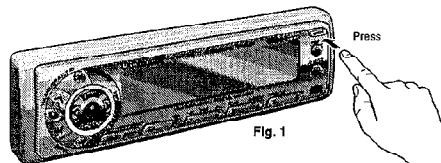


Fig. 1

- ③ Push the face plate to either the right or left, then pull it out toward yourself.

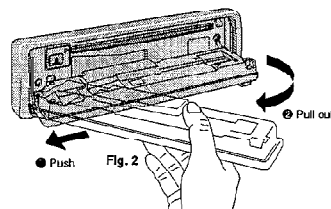


Fig. 2

- ④ As shown in Fig. 3, gently push the lower side of the case and open its cover. Keep the removable face plate in the case. Then, you can bring the plate safely.

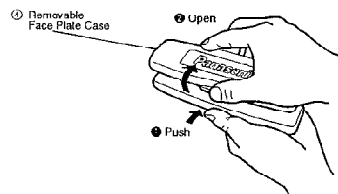


Fig. 3

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Anti-Theft System continued

To install the Removable Face Plate

- ① Fit either of the right or left hole in the face plate over the main unit's pin, and fit it over on the other side while pushing it.

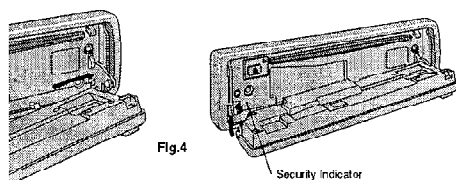


Fig. 4

- ② After fitting the face plate holes, move the face plate up and down a few times to make sure that it has been fitted securely.

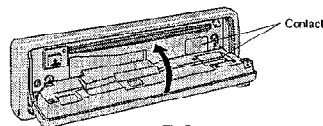


Fig. 5

- ③ Close the front panel and press the right side of the face plate until "click" is heard.

Caution:

1. Before removing the removable face plate, make sure the power is off.
2. This removable face plate is not water-proof. Do not expose it to water or excessive moisture.
3. Do not remove the removable face plate while driving your car.
4. Do not place the removable face plate on the dashboard or nearby areas where the temperature rises to high levels.
5. Do not touch the contacts on the removable face plate or on the main unit because this may result in poor electrical contacts.
6. If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.
7. When the front panel is opened, do not force it down and do not put anything on it because these may result in damage to the unit.

Security Indicator

The security indicator blinks when the removable face plate is removed from this unit.

Activate Security Indicator

1. Press and hold SEL for more than 2 seconds when the power is on. "LED ON" is displayed, and the security indicator turned on.

(Default : The security indicator is on.)

2. To check whether the unit is set in the LED ON mode, make sure that the security indicator blinks when the removable face plate is removed.

Display	Security Indicator	Panel Removal Alarm
LED ON	Blinks	ON
LED OFF	OFF	OFF

(Press and hold SEL for more than 2 seconds.)

Panel Removal Alarm

This alarm sounds to warn you not to forget to remove the panel before leaving your car. This function is activated when the security indicator is on.

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Installation

Preparation

- Before installation check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (-) battery terminal (see caution below).
- Unit should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.

Caution:

For installation to cars with trip or navigational computers, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. For this type of car, battery could not be disconnected. Therefore, extra care should be taken to prevent short circuiting.

In-dash Installation

Installation Opening

In-dash installation can be done if the car's dash board has an opening for this unit as shown in Fig. 1. The car's dashboard should have a thickness of 4.5mm - 8mm in order to make the installation of the unit.

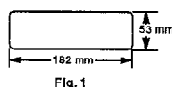


Fig. 1

Installation Precautions

This equipment, if possible, should be installed by a professional installer.

In case of difficulty, please consult your nearest authorized Panasonic Service Center.

1. This system is to be used only in a 12-volt DC battery system (car) with negative ground.
2. Follow the electrical connection on page 38 carefully. Failure to do so may result in damage to the unit.
3. Connect the power lead after other connections are made.
4. Be sure to connect the YELLOW lead to the positive terminal (+) of the battery or fuse block (BAT) terminal.
5. Insulate all exposed wires to prevent short circuiting.
6. Secure all loose wires after installing the unit.
7. Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

Supplied Hardware

No.	Item	Diagram	Qty
①	Mounting Collar		1
②	Mounting Bolt (5 mm)		1
③	Power Connector		1
④	Removable Face Plate Case		1

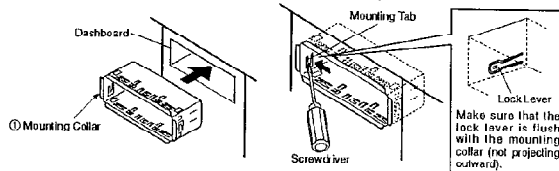
No.	Item	Diagram	Qty
⑤	Remote Control Unit		1
⑥	Trim Plate		1
⑦	Lithium Battery		1
⑧	ISO Antenna Adaptor		1

Installation Procedures

Note: Disconnect the cable from the negative (-) battery terminal.

1. Secure the Mounting Collar ①

Insert Mounting Collar ① into the car's dashboard, and bend mounting tabs out with a screwdriver.



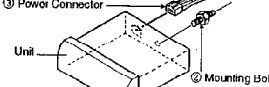
2. Secure the rear of the unit.

a) Check the electrical connection by referring to this operating instructions.

b) Connect the Mounting Bolt ② using a suitable wrench.

a) Insert Power Connector ③ to the unit.

③ Power Connector



d) Insert the unit into Mounting Collar ① and push it in until "click" is heard.

e) Secure the rear of the unit to the car by either of the two recommended methods.

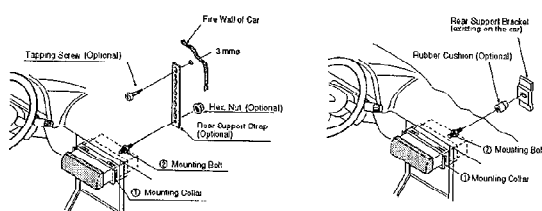
■ Using the Rear Support Strap (Optional)

Attach one end of the Rear Support Strap to the rear of the unit, and the other end to the Fire Wall of car, or some other metallic area.

■ Using the Rubber Cushion (Optional)

(If there is an existing Rear Support Bracket on the Fire Wall of car.)

Cover Mounting Bolt ② on the rear of the unit with Rubber Cushion, and mount it into the existing Rear Support Bracket.

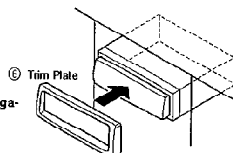


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Installation continued

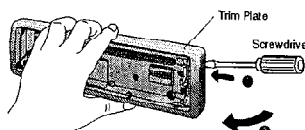
3. Install the Trim plate ⑥.



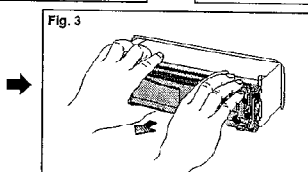
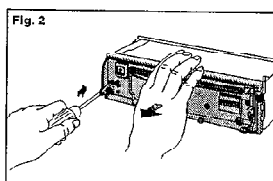
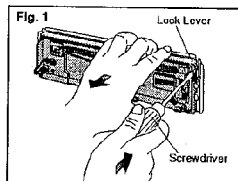
4. After installation reconnect the negative (-) battery terminal.

To Remove the Unit

- a) Remove the removable face plate. (See page 33.)
- b) Remove the trim plate with a screwdriver as shown in the figure.



- b) Pull out the unit while pushing the lock lever using Screwdriver. (Fig. 1, Fig. 2)
- c) Remove the unit pulling with both hands. (Fig. 3)

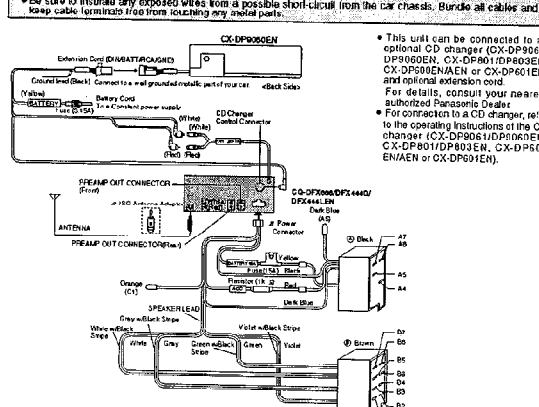


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Electrical Connection

Caution:

- Confirm the note on page 4, and make connections in the connectors on car side.
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 3 mm long from their ends before connecting. (The cords except for ISO connector's cords)
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cable and keep cable terminals free from touching any metal parts.



Loudspeakers (connector B)

	Left +	Left -	Right +	Right -
Front	B5 (White)	B6 (White w/Black Stripe)	B3 (Gray)	B4 (Gray w/Black Stripe)
Rear	B7 (Green)	B8 (Green w/Black Stripe)	B1 (Violet)	B2 (Violet w/Black Stripe)

A4

BATTERY LEAD (To Battery of Car) (Yellow)
Connect to the "BAT" terminal on the fuse block of the car. The power should be supplied continuously to the yellow leads regardless of the switch position of the ignition key.

A5

NOT-ANTENNA RELAY CONTROL LEAD (Dark Blue)
(For Motor Antenna) (Max. 500mA)
This lead is not intended for use with switch actuated power antenna.

AMP-RELAY CONTROL POWER LEAD
This lead is for connection to Panasonic power amplifiers.

A7

POWER LEAD (Red)
Connect to the "radio" power line of the car or to the "IGN" or "ACC" terminals of the fuse block.

A8

GROUND LEAD (Black)
Connect to a well grounded metallic part of your car.

C1

TELEPHONE MUTE LEAD (Orange)
(To car telephone mute line)
TELEPHONE MUTE
The telephone mute lead, if connected to the car telephone mute line, will activate the muting circuit and the sound from the speakers cannot be heard while the telephone conversation is in progress.
Note: This telephone mute lead is for connection only to the radio mute line. Be sure to ascertain this because it will not work with other type of output system.

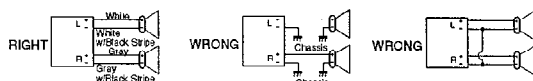
39

Speaker Connections

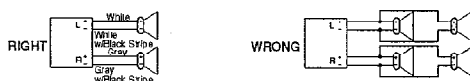
Caution:

1. Use ungrounded speakers only.
2. The speakers to be used with this unit should be able to handle more than 40W of audio power. If an optional amplifier is used, the speakers should be able to handle the maximum output power of the amplifier. Use of speakers with small input ratings can cause damage to the speakers.
3. The speaker impedance should be 4 - 8 ohms. If the impedance is too large or too small, it affects the output and may cause damage to the speakers or this unit.
4. Do not use 9-wire type speaker system having a common earth lead. Never connect the speaker cord to the body of the car. This unit uses the BTCL circuit, so each speaker should be connected separately using parallel vinyl insulated cords.
5. The speaker cords and the power amplifier unit should be kept away (about 30cm apart) from the antenna and antenna extension cord.
6. Follow the connection diagram below carefully. Failure to do so may cause damage to both unit and speakers.

- Unit will be damaged if speakers (Front, Rear) are not connected properly.



- Do not connect more than one speaker to one set of speaker leads.



Special Notes

Notes on Compact Discs

ONLY USE DISCS CARRYING LABEL SHOWN ON THE RIGHT

- Dirt, dust, scratches and bending of disc will cause misoperation. Handle discs with care.
- Do not place stickers or make scratches on disc.
- Do not bend discs.
- Disc should always be kept in the case when not in use to prevent from damaging.
- Do not place discs in the following places:
 1. Direct sunlight;
 2. Dirty, dusty and damp areas;
 3. Near car heaters;
 4. Seats and dashboard.

Disc Cleaning
Use dry soft cloth to wipe the surface. If the disc is really dirty use soft cloth slightly dampened in isopropyl (rubbing) alcohol. Never use solvents such as benzene, thinner, conventional record cleaner, or mop as they may mar the surface of the disc.

Label

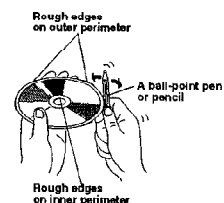
Do not touch the underside of the disc.

Do not bend.

Wipe the disc from center to outside direction.

Caution for use of a new Disc

A new disc may have rough edges on its inner and outer perimeter. If a disc with rough edges is used, proper setting will not be possible and the CD player will not play the disc. Therefore, remove the rough edges in advance by using a ball-point pen or pencil as shown on right. To remove the rough edges, press the side of the pen or pencil against the inner and outer perimeter of the disc.



TERMINALS DESCRIPTION

< Main Block >

■ IC600 : C2BBGF000015

Pin No.	Port	Description	I/O	Vol(V)
1	INIT C	Initial C	I	0
2	A-IN	Spectrum analyzer data	I	3.8
3	EJECT	Eject SW input	I	4.7
4	AV _{ss}	Analog ground	—	0
5	AF MUTE	AF mute	O	0
6	NC	No connection	—	—
7	AVREF	Reference voltage	—	4.5
8	CD-SO	CD data	I	3.2
9	CD-SI	CD data	O	3.8
10	CD-SCK	CD clock	O	5.0
11	CD.C DATA	CD changer data	O	0
12	N.C.	No connection	—	—
13	CD.C CLK	CD changer clock	I	0
14	REM OUT	CD changer remote control	O	4.6
15	PLL CE	PLL controller chip enable	O	0
16	PLL DATA (MI)	Data from PLL	I	5.1
17	PLL DATA (MO)	Data for PLL	O	0
18	PLL CLK	Clock for PLL	O	4.8
19	S.HDB	Bass-sound control (Note2)	O	4.8
20	CD RESET	CD reset	O	4.0
21	SMT-F	Not used	—	—
22	DOLBY	Not used	—	—
23	F/R	Not used	—	—
24	MS GAIN	Not used	—	—
25	MTL	Not used	—	—
26	CD ON	CD on/off control	O	0
27	SW3	CD mute	I	0
28	F.REEL	Not used	—	—
29	SW2	CD sw2 input	I	0
30	T-IN	Not used	—	—
31	CONT A	Not used	—	—
32	CONT B	Not used	—	—
33	VSS	Ground	—	0
34	CONT C	Not used	—	—
35	ST	FM stereo detection	I	4.7
36	IC2-CLK	Electronic volume clock	O	4.6
37	IC2-DATA	Electronic volume data	I/O	5.2
38	LED	Warning alarm LED control	O	5.2
39	EJ.ILL	Eject illumi. control	O	4.8
40	BZIN	Not used	—	—

Pin No.	Port	Description	I/O	Vol(V)
41	LCD-DI	LCD data input	O	0
42	LCD-DO	LCD data output	I	4.5
43	LCD-CLK	LCD clock	O	0
44	LCD-CE	LCD chip enable output	O	0
45	STBY	Amp stand-by	O	5.0
46	NC	No connection	—	—
47	NC	No connection	—	—
48	NC	No connection	—	—
49	POWER.LED	Power LED control	O	4.8
50	BZOUT	BEEP output	O	0
51	INV CONT2	Inverter control	O	0
52	INV CONT1	Inverter control	O	0
53	DECK.CNT	Deck power control	O	4.9
54	NC	No connection	—	—
55	FP OPN/CLS	Front panel open/close	I	5.1
56	ILL CONT	Illumi. control	O	4.8
57	PWR CNT	Power control	O	4.8
58	ACC	ACC detection	I	4.4
59	RDS DATA	RDS data input	I	2.5
60	/RESET	Reset input	I	4.4
61	REM	Remocon data input	I	4.1
62	BATT	Battery detection	I	4.3
63	RDS CLK	RDS clock input	I	2.5
64	CD.C.STB	CD changer strobe input	I	0
65	MUTE	Mute control	O	0
66	CD C2	Not used	—	—
67	EJ. ILL	(Connecting to ground)	—	0
68	VDD	+5V power supply	—	4.8
69	X2	Crystal oscillator	—	2.8
70	X1	Crystal oscillator	—	1.9
71	VSS	Ground	—	0
72	NC	No connection	—	—
73	NC	(Connecting to ground)	—	0
74	AVDD	+5V power supply	—	4.8
75	AVREF	(Connecting to VDD)	—	4.8
76	TEL MUTE	Telephone mute	O	5.0
77	PANEL	Panel detection	I	0.4
78	SD	B/S detection	I	0.4
79	INIT A	Initial value A (Note2)	I	{*1}
80	INIT B	Initial value B	I	0

Note 1 : Voltage measurements are with respect to ground,
with a voltmeter (Internal resistance : 10M ohms).

Note 2 (* 1) :

4 RV : CQ-DFX666LEN

0V : CQ-DFX444LEN/GLEN

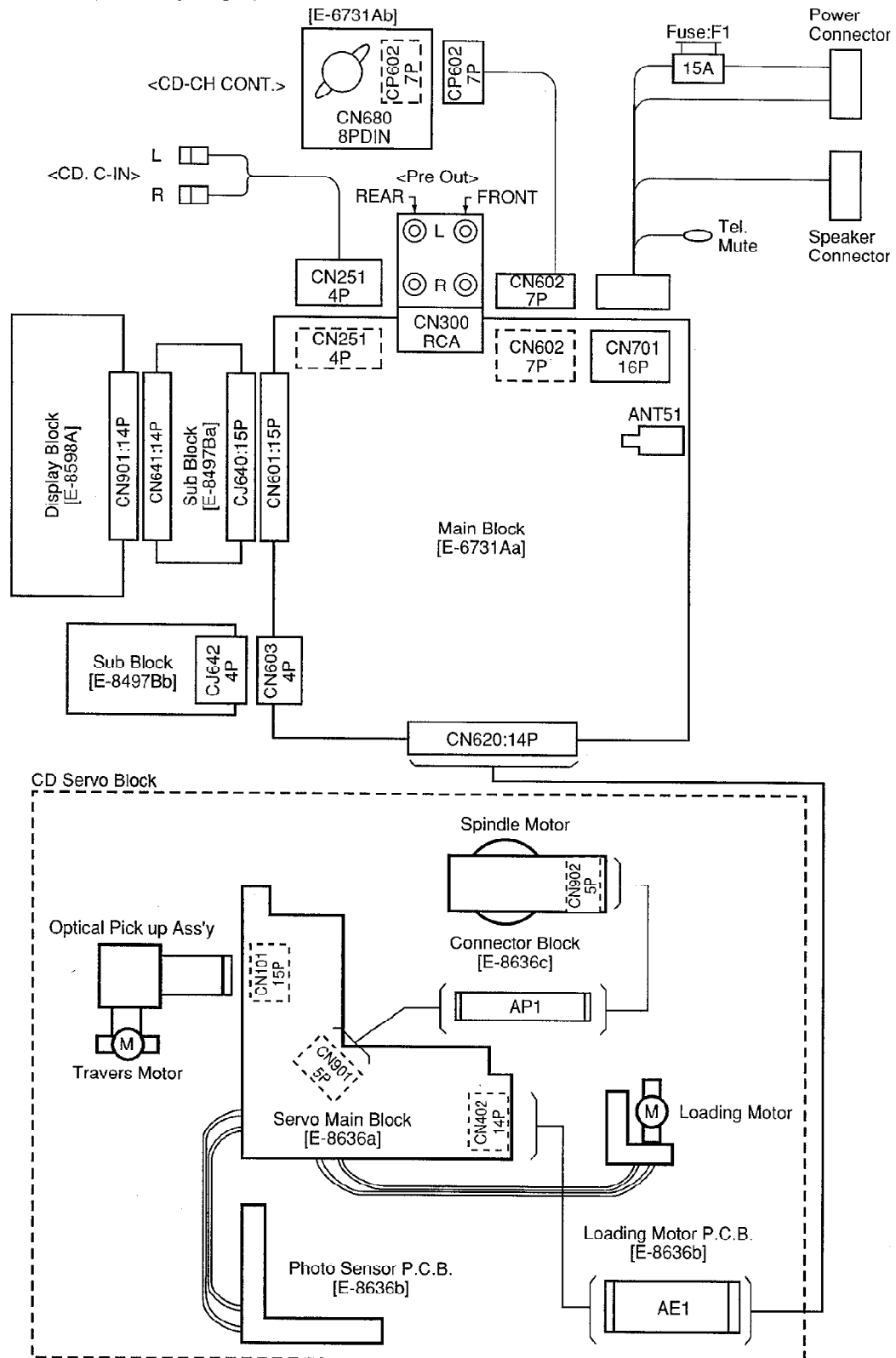
< Display Block >

■ IC901 : YEAMLC75884W

Pin No.	Port	Description	I/O	Vol(V)
1~51	S3~53	LCD segment data	O	2.5
52~55	COM1~4	LCD common	O	2.5
56	S54	LCD segment data	O	2.5
57~61	KS2~6	Key strobe	O	0.9
62~66	KI1~5	Key data	I	0
67	VDD	+5V power supply	—	5.1
68	VLCD	+5V power supply	—	5.1
69	VLCD1	LCD angle	—	3.3
70	VLCD2	LCD angle	—	1.7

Pin No.	Port	Description	I/O	Vol(V)
71	Vss	Ground	—	0
72	TEST	(Connecting to ground)	—	0
73	OSC	Oscillator terminal	—	3.9
74	/RESET	(Connecting to Vcc)	—	5.1
75	DO	Key data output	O	4.1
76	CE	LCD driver chip enable	I	0
77	CLK	LCD clock	I	0
78	DI	LCD data	I	0
79, 80	S1, 2	LCD segment data	O	2.5

WIRING CONNECTION

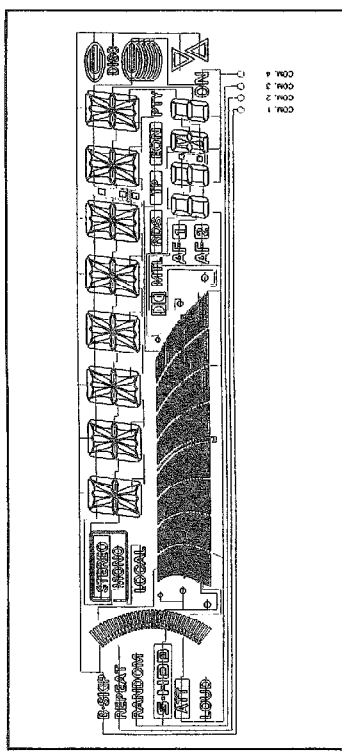


<Note> :

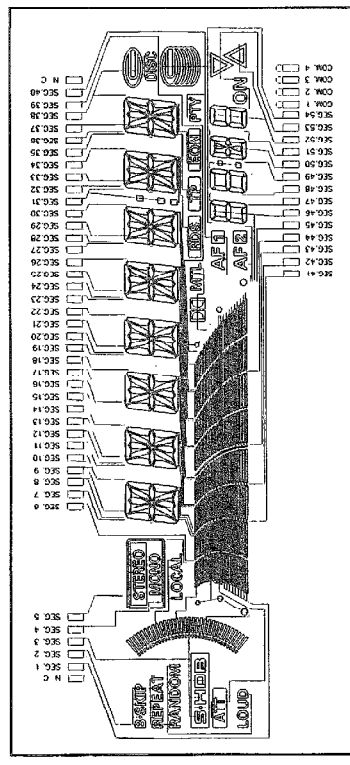
- This mark shows a Ref. No. of connector
- This mark shows a mounting position of connector.



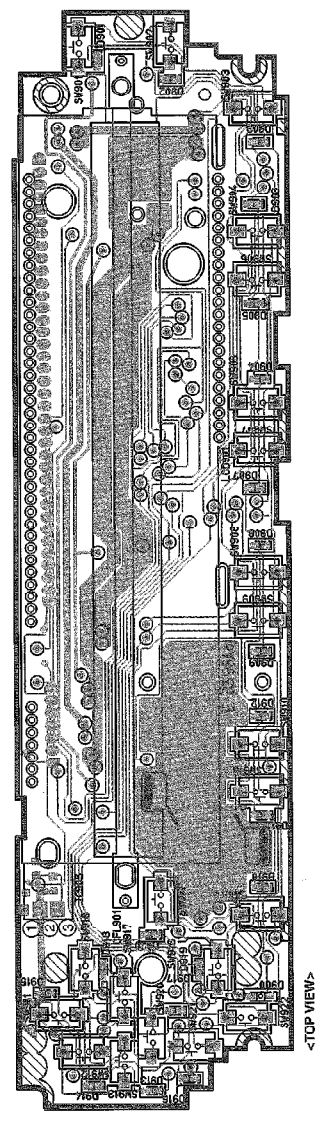
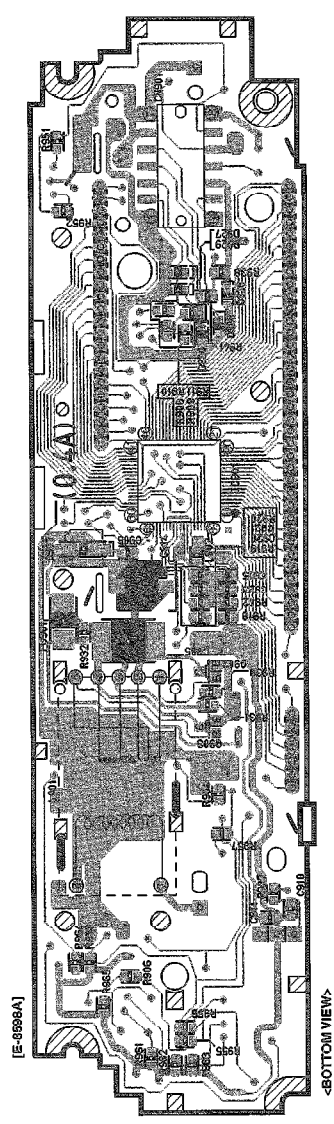
WIRING DIAGRAM (Display Block) MODELS CQ-DFX666/444G/444LEN



LCD801 Common Line Connection

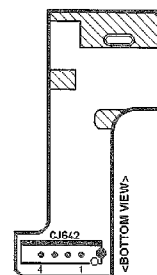
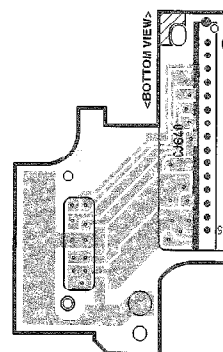
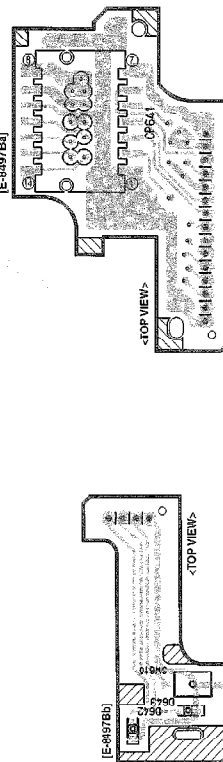
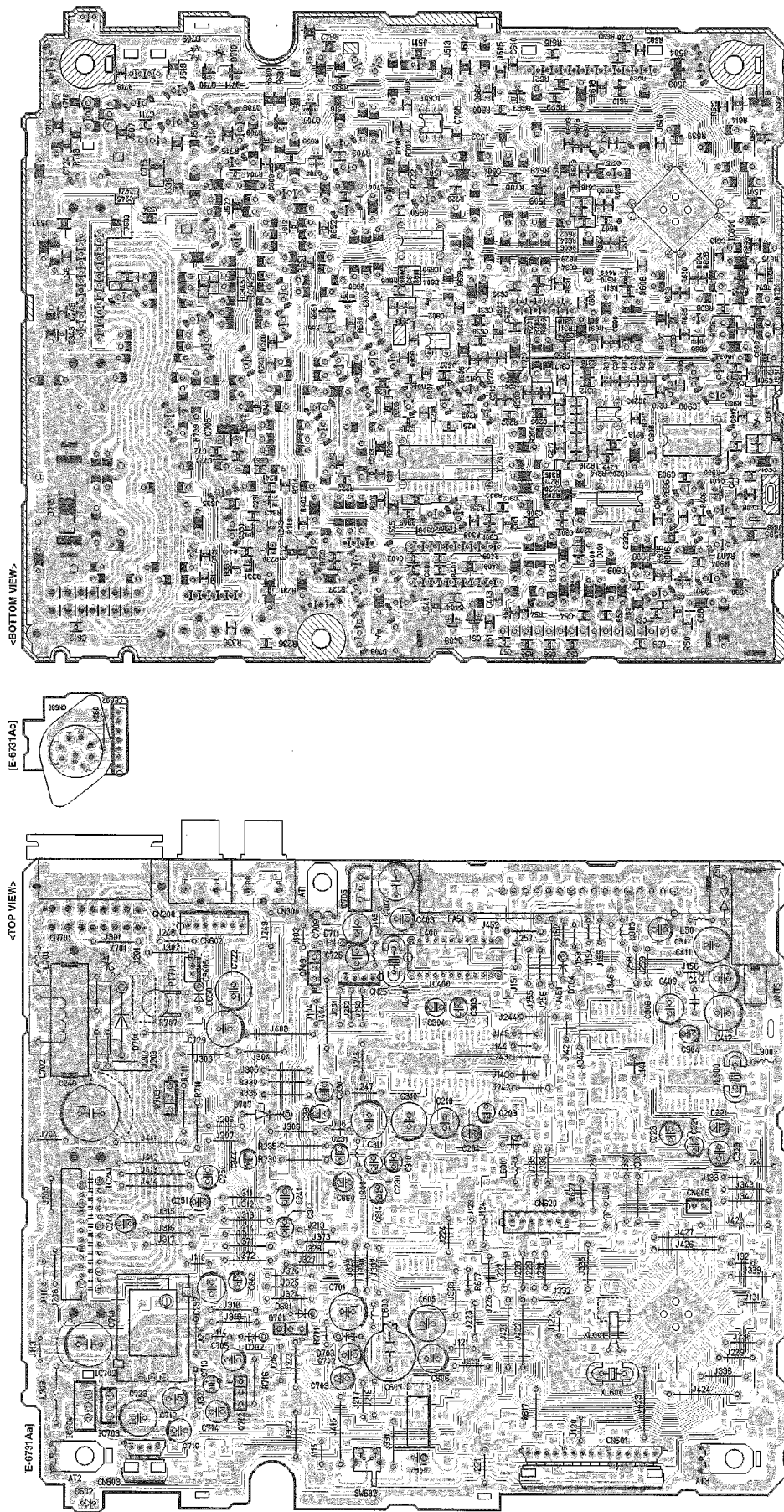


LCD801 Segment Connection

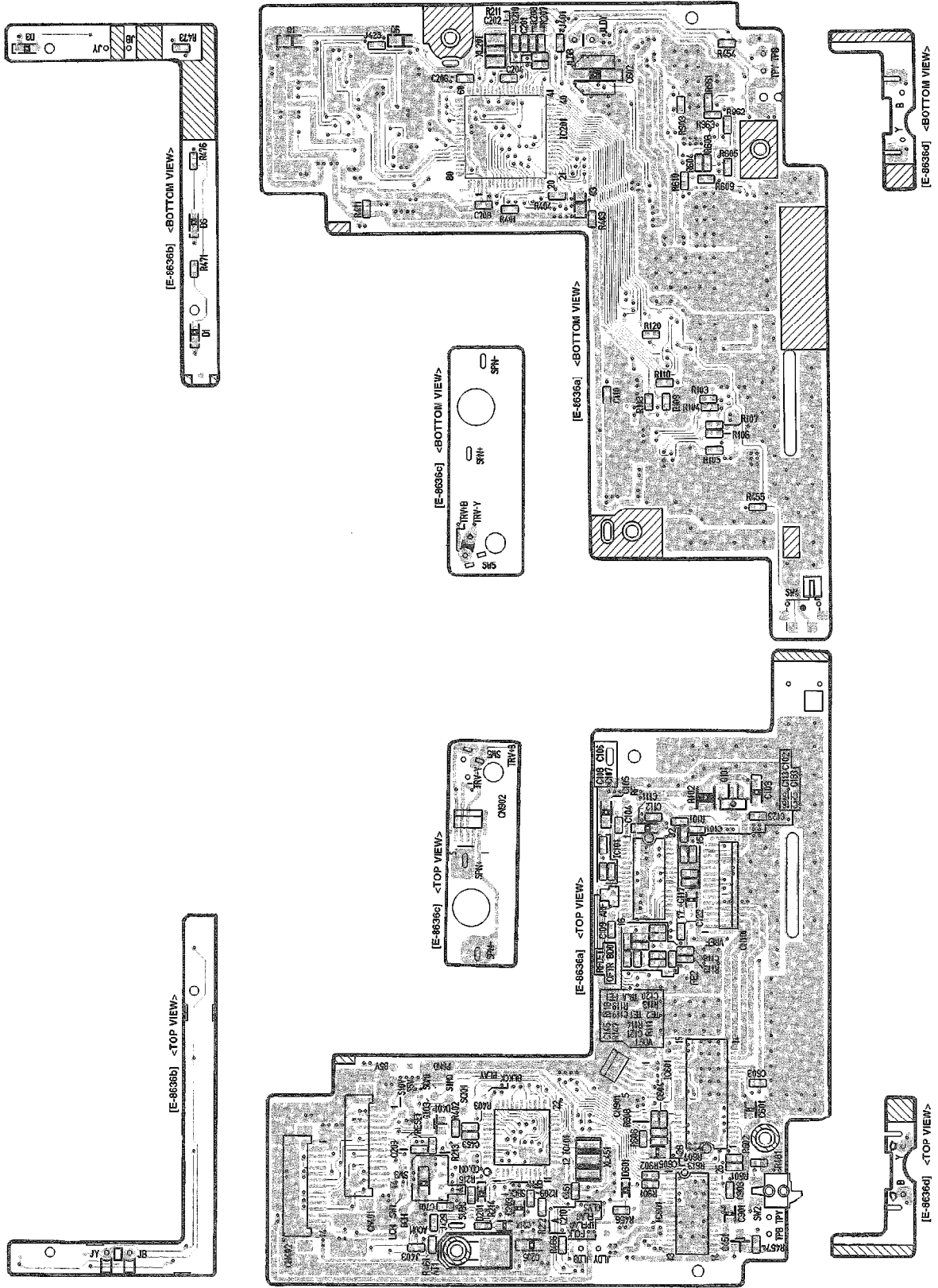


CO-DFX666LEN
CO-DFX444LEN/GLEN
CO-DFX444LENGLEN

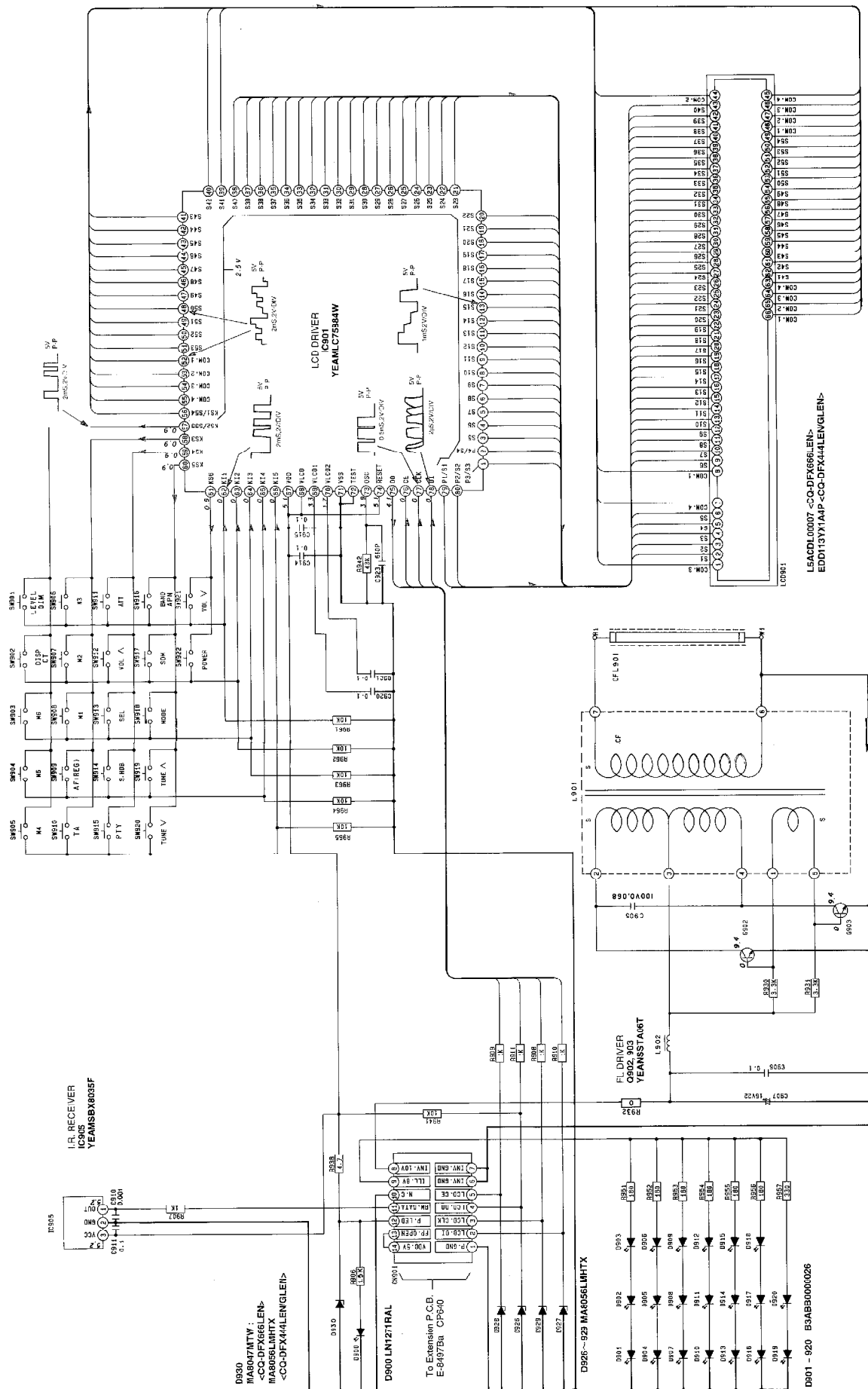
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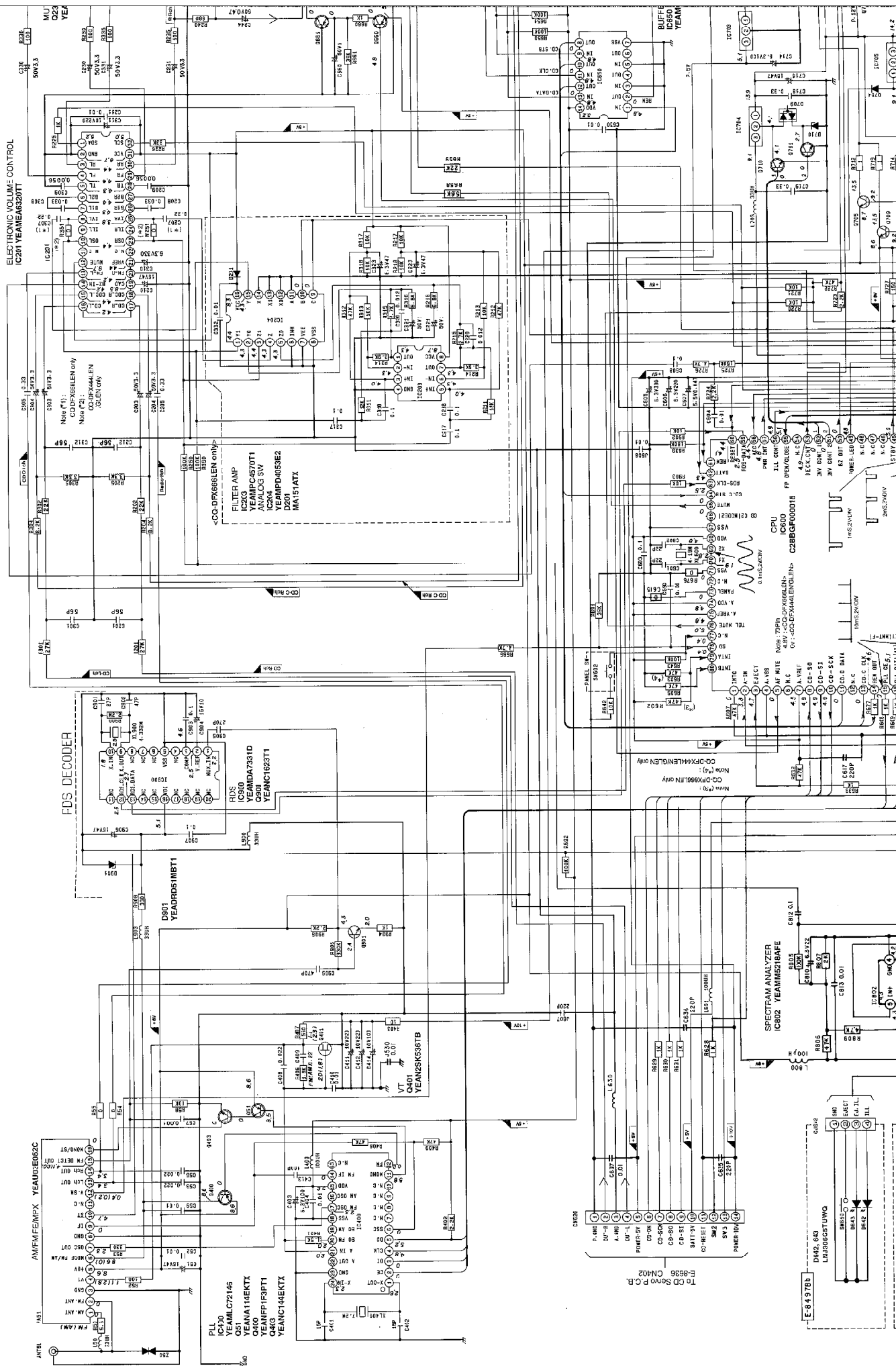
WIRING DIAGRAM (CD Servo Block) MODELS CQ-DFX666/444G/444LEN

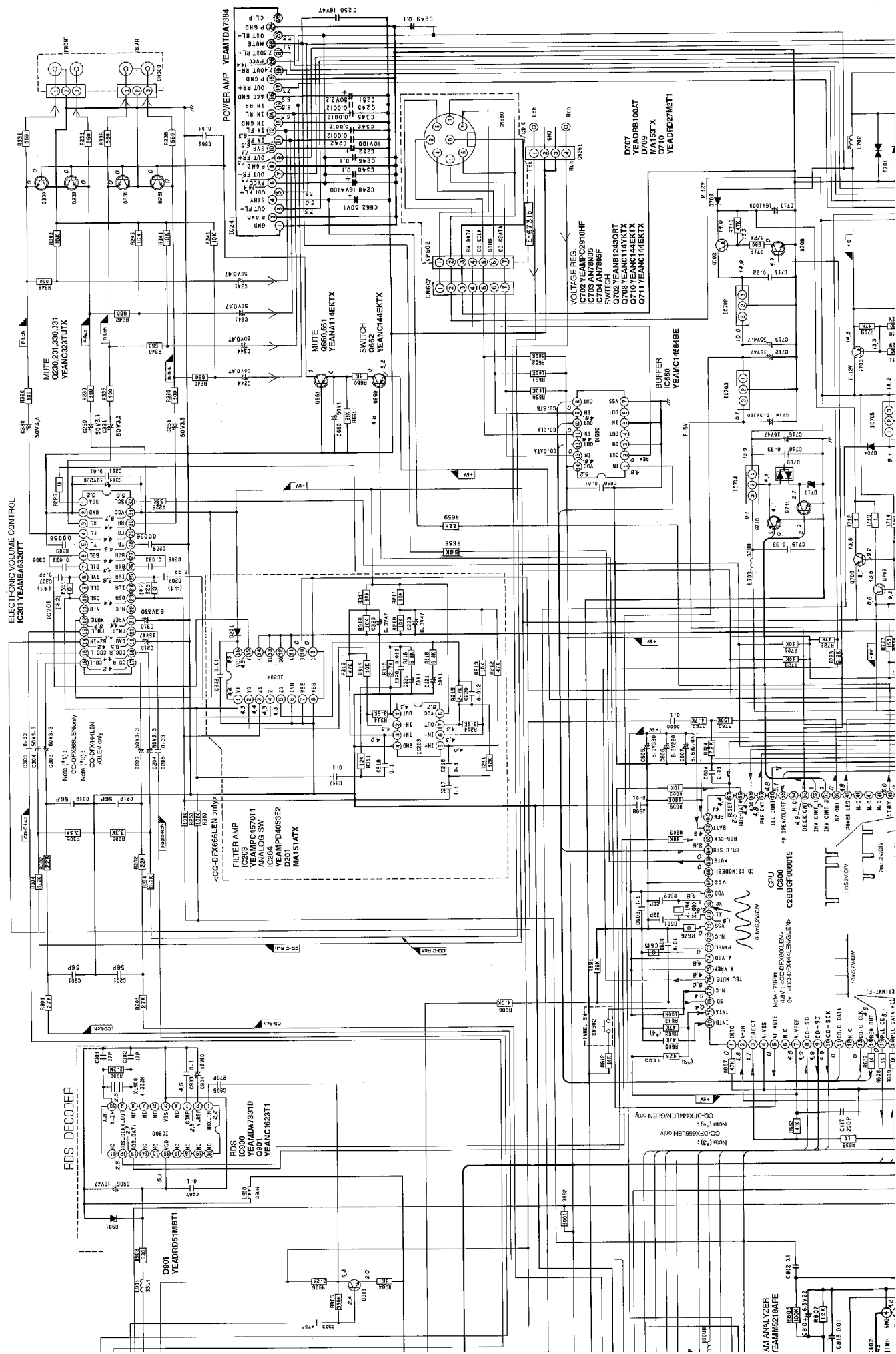


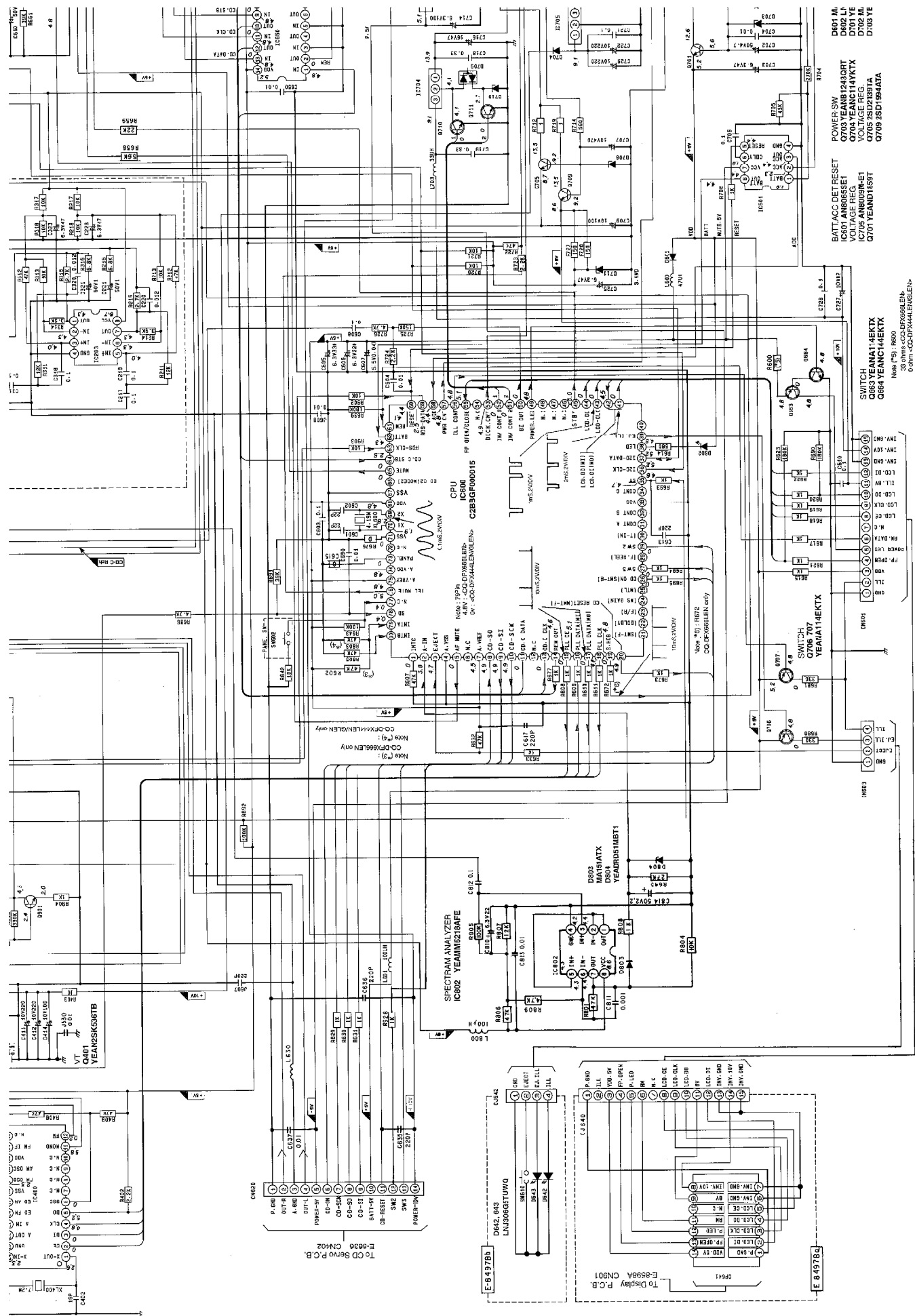
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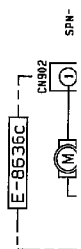
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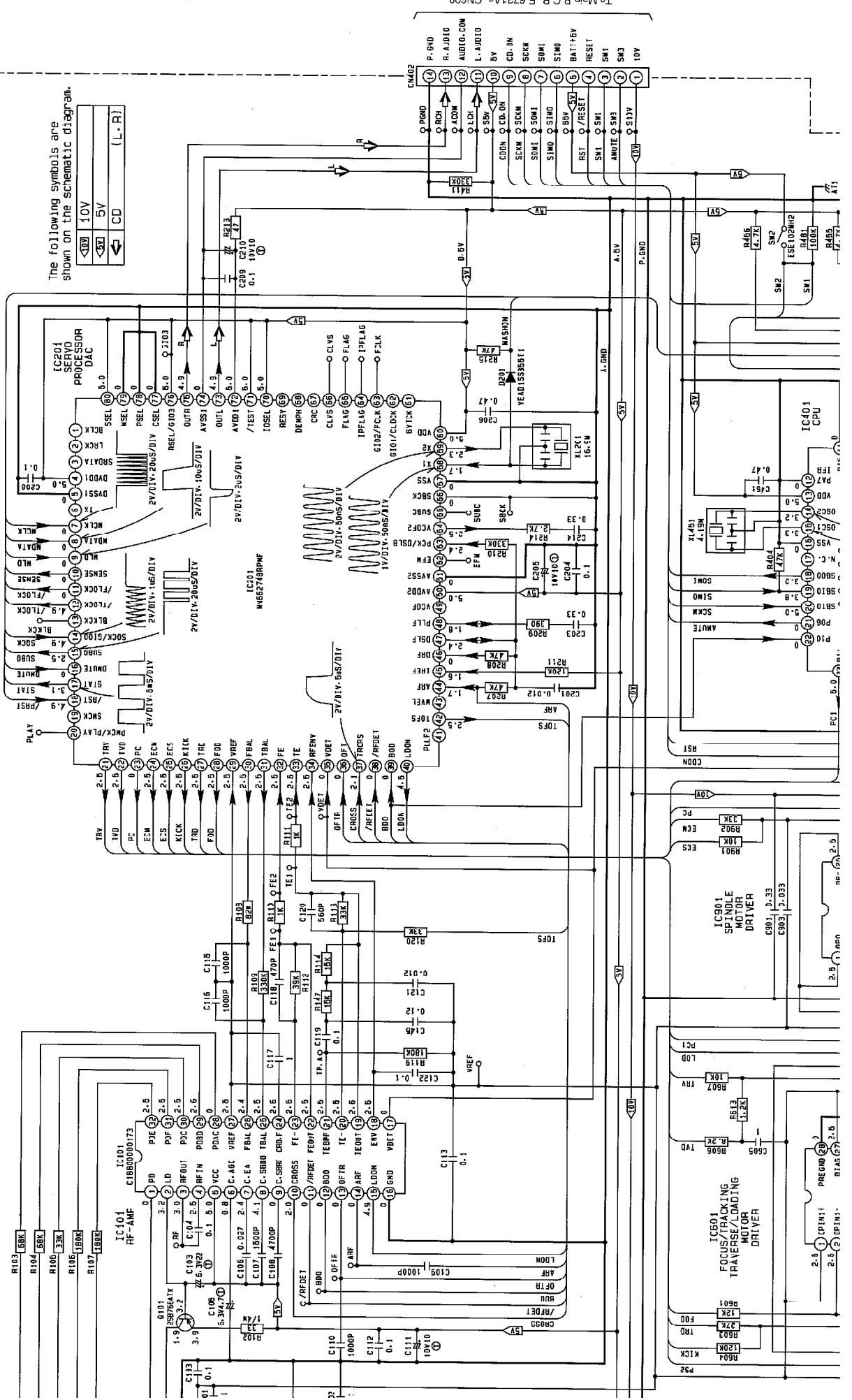
ELECTRONIC VOLUME CONTROL
IC201 YEAMEA6320TT



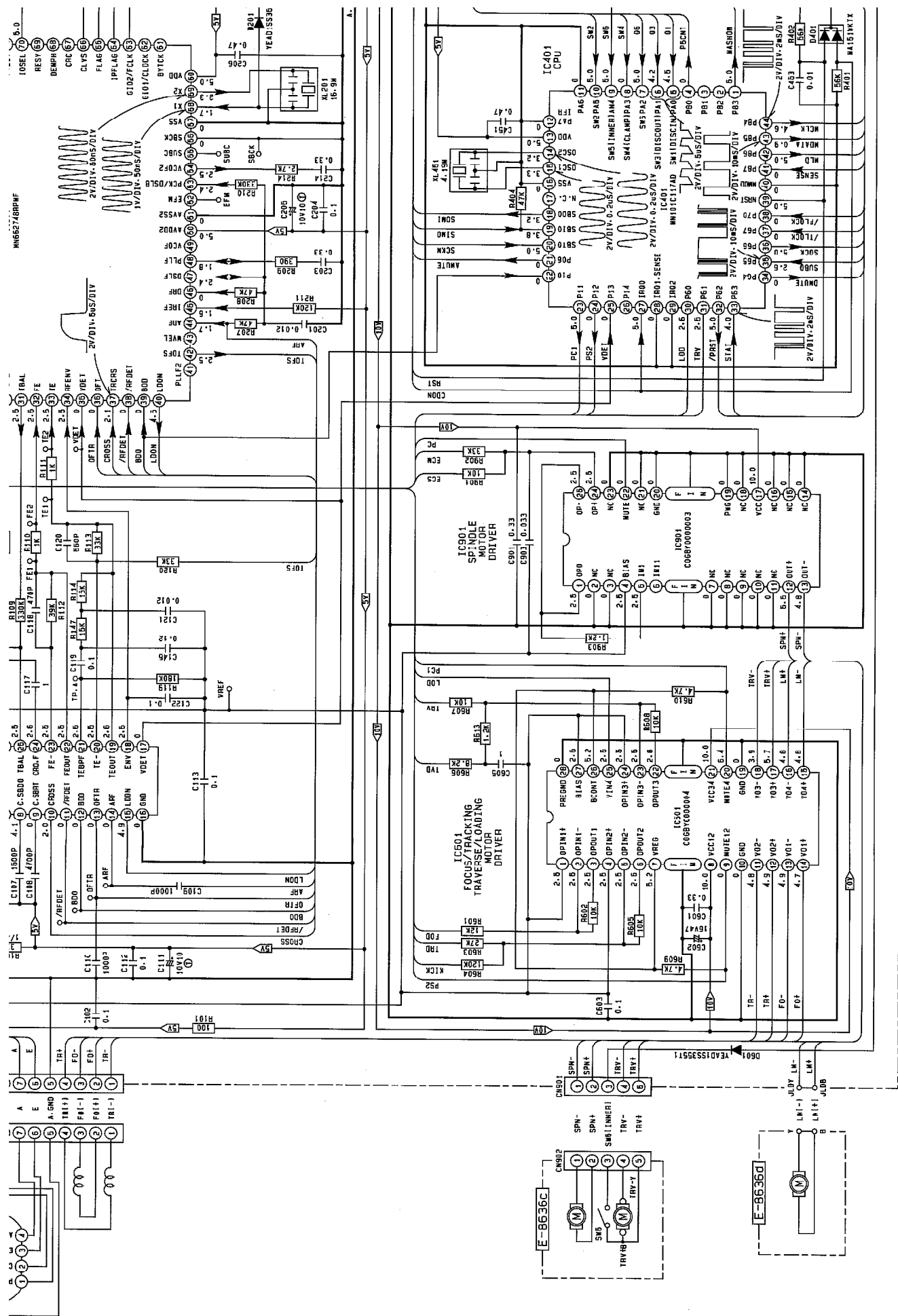
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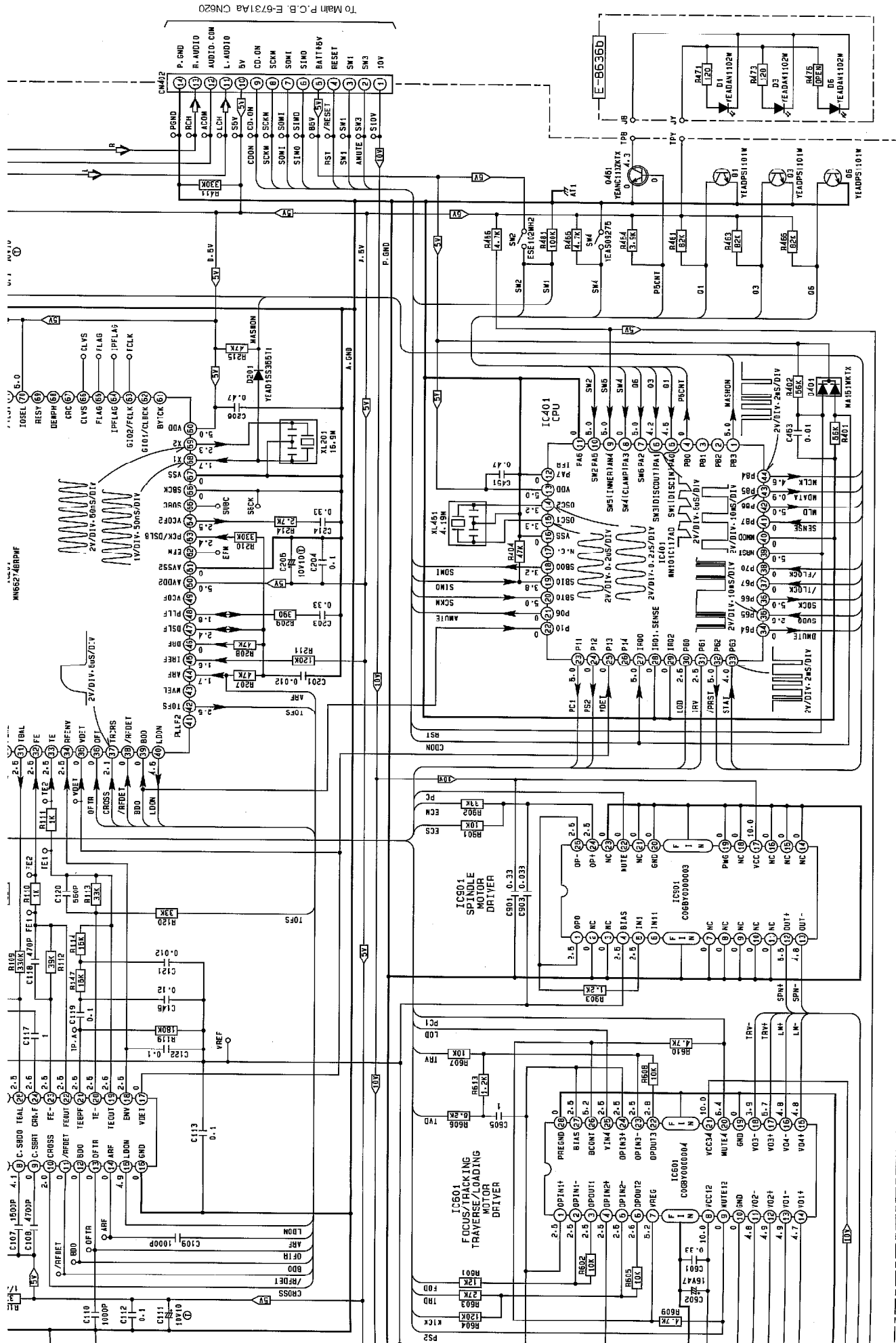


E-66362



To Main P.C.B. E-6731Aa CN620





TERMINALS DESCRIPTION (CD Servo Block)

■ IC201 MN662748RPMF

Pin No.	Port	Description	I/O	Vol. (V)
1	BCLK(NG)	—	—	—
2	LRCK(NG)	—	—	—
3	SRDATA(NG)	—	—	—
4	DVDD1	+5V Power Supply for Digital	I	5.0
5	DVSS1	Ground for Digital	I	0
6	TX(NG)	—	—	—
7	MCLK	Command Clock	I	0
8	MDATA	Command Data	I	0
9	MLD	Command Load	I	0
10	SENSE	SENSE Signal	O	0
11	/FLOCK	Focus Servo	O	0
12	/TLOCK	Tracking Servo	O	4.9
13	BLCK(NG)	—	—	—
14	SQCK/GIOO	EX-clock for Subcode Q	I	4.9
15	SUBQ	Subcode Q-cord	O	2.5
16	DMUTE	DSP Muting	I	0
17	STAT	Status Signal	O	3.1
18	/RST	Reset Input	I	4.9
19	SMCK(NG)	—	—	—
20	PMCK/PLAY (NC)	—	—	—
21	TRV	Traverse Motor Control	O	2.5
22	TVD	Traverse Motor Drive	O	2.5
23	PC	Spindle Motor Control	O	0
24	ECM	Spindle Motor Drive	O	2.5
25	ECS	Spindle Motor Drive	O	2.5
26	KICK	Kick Pulse	O	2.5
27	TRD	Tracking Drive	O	2.5
28	FOD	Focus Drive	O	2.5
29	VREF	Reference Voltage	I	2.5
30	FBAL	Focus Balance	O	2.5
31	TBAL	Tracking Balance	O	2.5
32	FE	Focus Error	I	2.5
33	TE	Tracking Error	I	2.5
34	RFENV	RF Envelope	I	2.5
35	VDET	Vibration Detecting	I	0
36	OFT	OFF Track Signal	I	0
37	TRCRS	Track Cross	I	2.1
38	/RFDET	RF Detecting Signal	I	0
39	BDO	Drop-Out Signal	I	0
40	LDON	Laser ON Signal	O	4.5
41	PLL2(NG)	—	—	—
42	TOF9	TE Offset	O	2.5
43	WVEL(NG)	—	—	—
44	ARF	RF Signal	I	1.7
45	IRFF	Reference Current Input	I	1.6
46	DRF	DSL Bias	I	0
47	DSLIF	Loop Filter for DSL	I/O	2.4
48	PLLIF	Loop filter for PLL	I/O	1.8
49	VCOF(NG)	—	—	—
50	AVDD2	Power Supply for Analog	—	5.0
51	AVSS2	Ground for Analog	—	0
52	EFM(NG)	—	—	—
53	POK/DSL9	DSL Bias	I	2.4
54	VCOF2	Tracking Offset	O	2.5
55	SUBQ(NG)	—	—	—
56	SBCK	Connect to Ground	—	—
57	VSS	Ground	—	0
58	X1	Crystal oscillator	I	1.7
59	X2	Crystal oscillator	O	2.3
60	VDD	+5V Power Supply	—	5.0
61	BYTCK(NG)	—	—	—
62	GI01/CLCK(NG)	—	—	—
63	GI02/CLK(NG)	—	—	—
64	IP FLAG(NG)	—	—	—
65	FLAG(NG)	—	—	—
66	CLVS(NG)	—	—	—
67	CRC(NG)	—	—	—
68	DEMPH(NG)	—	—	—
69	RESV(NG)	—	—	—
70	IOSEL	Connect to Ground	I	0
71	/TEST	Connect to Ground	I	0
72	AVDD1	+5V Power Supply for Analog	—	4.9
73	OUTL	Audio Output (Lch)	O	4.9
74	AVSS1	Ground for Analog	—	0
75	OUTR	Audio Output (Rch)	O	4.9
76	RSEL/GI03	Connect to Ground	I	0
77	OSEL	Connect to Ground	I	0
78	PSEL	Connect to Ground	I	0
79	MSEL	Connect to Ground	I	0
80	SSEL	Mode select for output	I	5.0

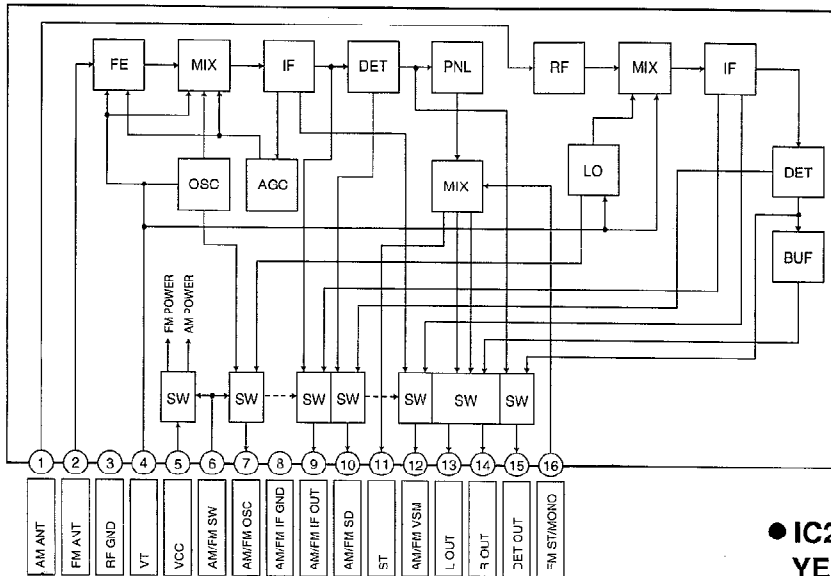
■ IC401 MN101C117AD

Pin No.	Port	Description	I/O	Vol. (V)
1	MASHON	Servo IC OSC Control	O	5.0
2	P92(NG)	—	—	—
3	P81(NG)	—	—	—
4	P5CNT	LED Power Control (Hi-Z ON L:OFF)	O	0
5	Q1	Photo Sensor Signal (DISC IN)	I	4.5
6	Q3	Photo Sensor Signal (DISC OUT)	I	4.2
7	Q6	Photo Sensor Signal (Option)	I	5.0
8	SW4	Clamp SW Signal (L:Sel)	I	0
9	SW5	Inner SW Signal (L:Inner SW ON)	I	5.0
10	SW2	Feeder Arm SW (H:NO DISC L:DISC IN)	I	5.0
11	PA6	Connect to Ground	—	0
12	PA7/IFR	Test Mode Select (H:RFI measurement) Connect to Ground	I	0
13	VDD	+5V Power Supply	—	5.0
14	OSC2	4.19MHz Crystal oscillator	—	5.0
15	OSC1	4.19MHz Crystal oscillator	—	3.3
16	VSS	Ground	—	0
17	(NG)	—	—	—
18	SOMI	Data Output	O	3.2
19	SIMO	Data Input	I	3.8
20	SCKM	Serial Clock	I	5.0
21	AMUTE	Audio Signal Mute (H:Mute ON)	O	0
22	BDO	Drop Out Signal Input	I	0
23	PC1	Loading Motor Drive Control(H:Mute)	O	5.0
24	PS2	Feed TR Actuator DriveControl (H:Mute)	O	0
25	VDET	Vibration Detecting Signal Input	I	0
26	P14 (NC)	—	—	—
27	GDON	CD ON signal	I	5.0
28	IRQ1.SENSE	Connect to Ground	—	0
29	IRQ2	Connect to Ground	—	0
30	LOD	Loading Motor Control (H:OUT L:IN Hi-Z:Stop)	—	2.6
31	TRV	Traverse Motor Control (H:to Inside L:to Outside Hi-Z:Stop)	—	2.5
32	/PRST	Servo IC Reset Signal (L:Reset)	O	5.0
33	STAT	Status Signal	I	4.0
34	DMUTE	DSP Control (H:Mute)	O	0
35	SUBQ	SubCode Q Data Input	I	2.5
36	SQCK	SubCode Q Data Clock	O	5.0
37	/TLOCK	Tracking Servo (L:Lock)	I	0
38	/FLOCK	Focus Servo (L:Lock)	I	0
39	NRST	Reset Input	I	5.0
40	MMOD	Connect to Ground	—	0
41	SENSE	SENSE Signal	I	0
42	MLD	Command Load	O	5.0
43	MDATA	Command Data	O	0.9
44	MCLK	Command Clock	O	4.8

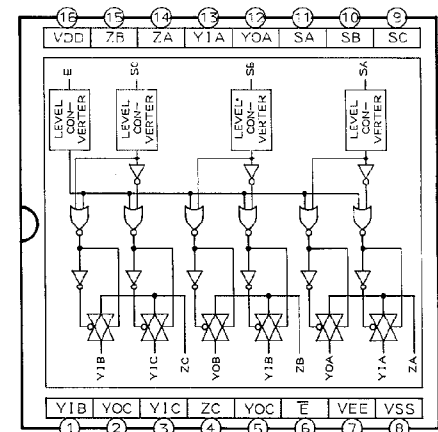
PACKAGE AND IC BLOCK DIAGRAM

<Main Block>

● PA51 YEAU03E052C

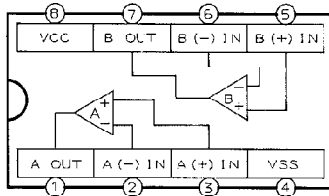


● IC204 YEAMPD4053E2

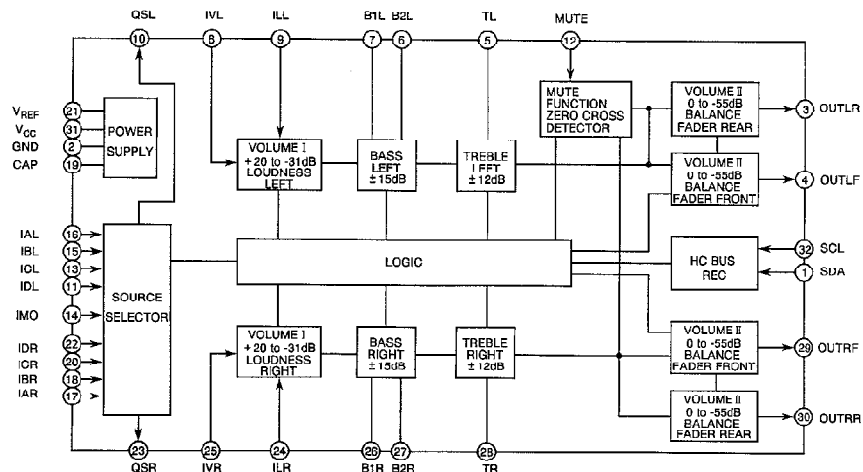


● IC203 YEAMPC4570T1

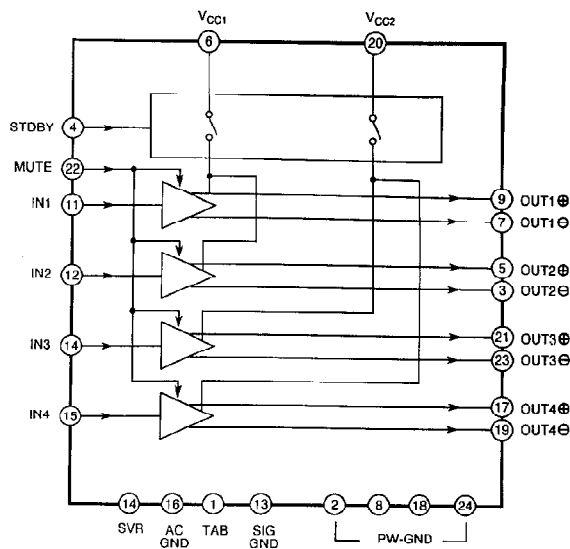
● IC802 YEAMM5218AFE



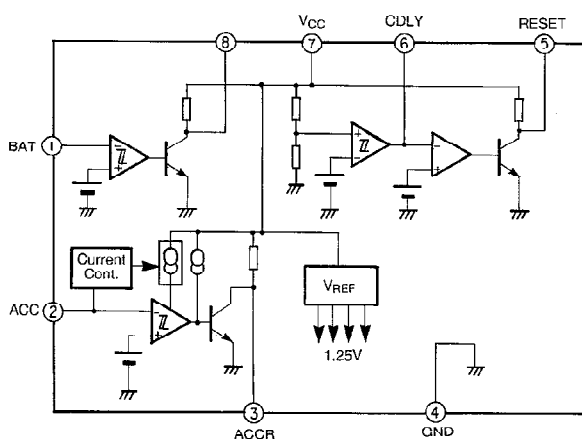
● IC201 YEAMEA6320TT



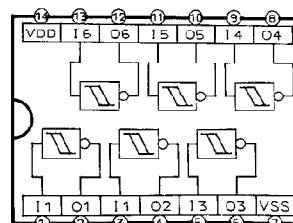
● IC241 YEAMTDA7384



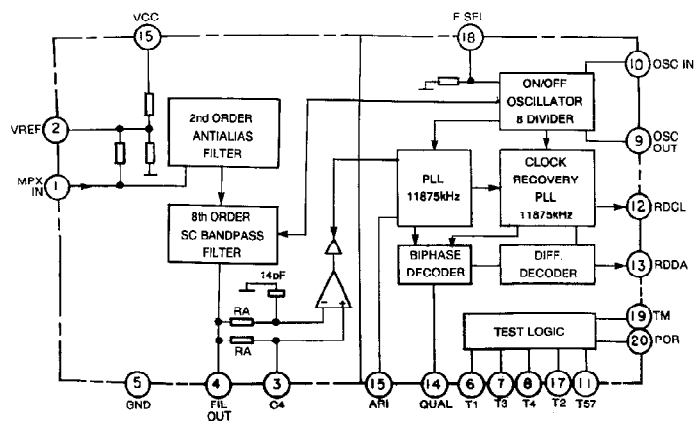
● IC601 AN8065SE1



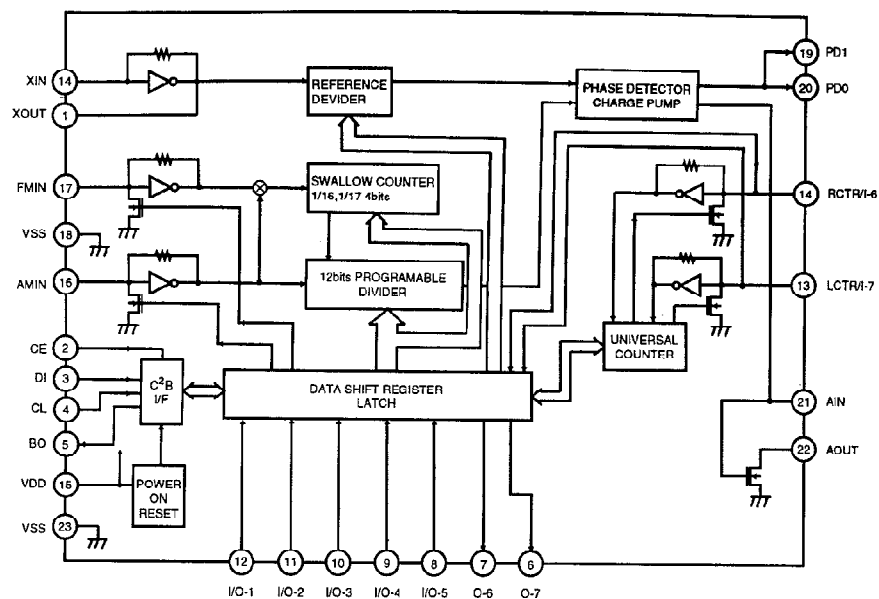
● IC650
YEAMC14584BE



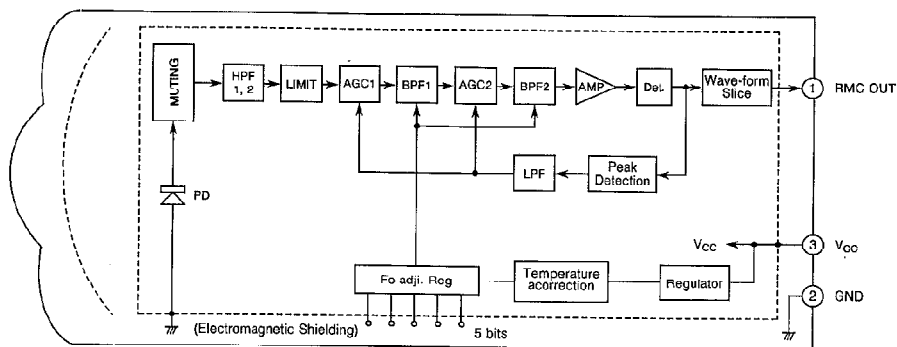
● IC900
YEAMDA7331D



● IC400 YEAMLC72146

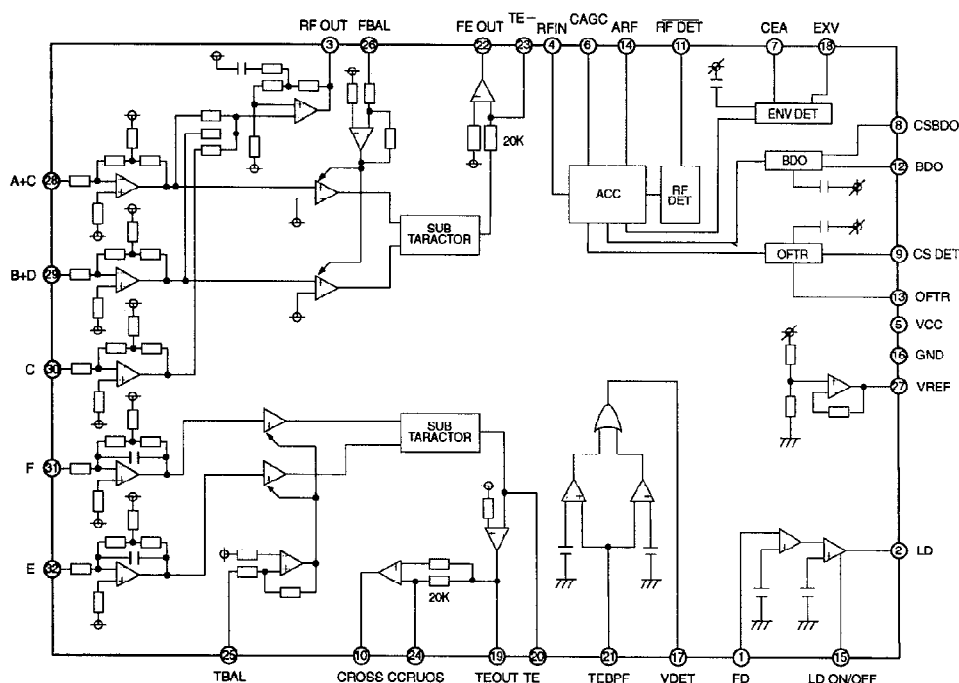


<Display Block> ● IC905 YEAMSBX8035F

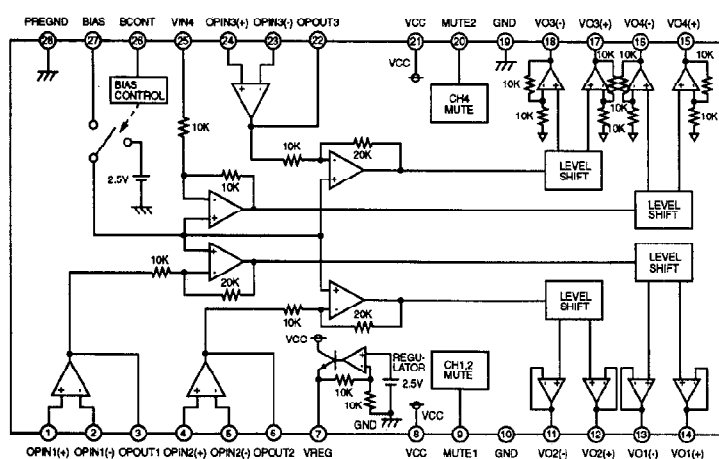


<CD Servo Block>

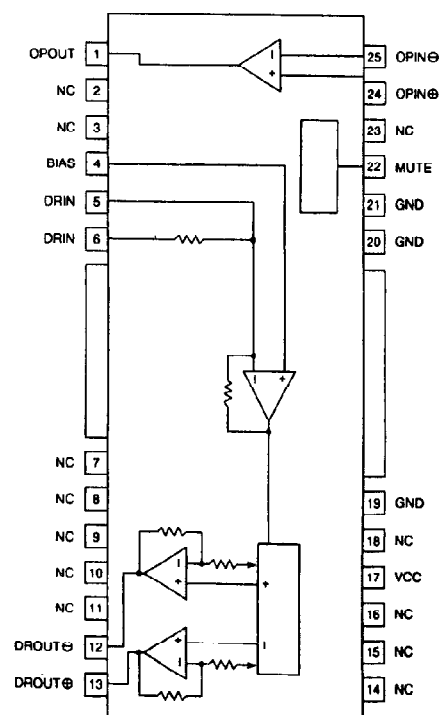
● IC101 C1BB00000173



● IC601 C0GBY00000004



● IC901 C0GBY00000003



1 REPLACEMENT PARTS LIST

Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

1.1. IC's and Transistors

MAIN BLOCK [E6731A]

Ref. No.	Part No.	Part Name & Description	Remarks
IC201	YEAMEA6320TT	IC	
IC203	YEAMPC4570T1	(CQ-DFX666LEN) IC	
IC204	YEAMPD4053E2	(CQ-DFX666LEN) IC	
IC241	YEAMTDA7384	IC	
IC400	YEAMLC72146	IC	
IC600	C2BBGF000015	IC	
IC601	AN8065SE1	IC	
IC650	YEAMC14584BE	IC	
IC702	YEAMPC2910HF	IC	
IC703	AN78N05	IC	
IC704	AN7805F	IC	
IC705	AN8009M-E1	IC	
IC802	YEAMW5218AFE	IC	
IC900	YEAMDA7331D	IC	
PA51	YEAU03E052C	Tuner IC	
Q51	YEANA114EKT	Transistor	
Q230	YEANC323TUTX	Transistor	
Q231	YEANC323TUTX	Transistor	
Q330	YEANC323TUTX	Transistor	
Q331	YEANC323TUTX	Transistor	
Q400	YEANFP1F3PT1	Transistor	
Q401	YEAN2SK536TB	Transistor	
Q403	YEANC144EKT	Transistor	
Q650	YEANA114EKT	Transistor	
Q661	YEANA114EKT	Transistor	
Q663	YEANA114EKT	Transistor	
Q664	YEANC144EKT	Transistor	
Q701	YEAND1859T	Transistor	
Q702	YEANB1243QRT	Transistor	
Q703	YEANB1243QRT	Transistor	
Q704	YEANC114YKTX	Transistor	
Q705	2SD2139TA	Transistor	
Q706	YEANA114EKT	Transistor	
Q707	YEANA114EKT	Transistor	
Q708	YEANC114YKTX	Transistor	
Q709	2SD1994ATA	Transistor	
Q710	YEANC144EKT	Transistor	
Q711	YEANC144EKT	Transistor	
Q901	YEANC1623T1	Transistor	

DISPLAY BLOCK [E8598A]

Ref. No.	Part No.	Part Name & Description	Remarks
IC901	YEAMLC75894W	IC	
IC905	YEAMSEX8035F	IC	
Q902	YEANSSTA06T	Transistor	
Q903	YEANSSTA06T	Transistor	

CD SERVO BLOCK [E8636]

Ref. No.	Part No.	Part Name & Description	Remarks
IC101	C1BB00000173	IC	
IC201	MN662748RPMF	IC	
IC401	MN101C117AD	IC	
IC601	C0GBY0000004	IC	
IC901	C0GBY0000003	IC	
Q1	YEADPS1101W	Transistor	
Q3	YEADPS1101W	Transistor	
Q101	2SB766ATX	Transistor	
Q451	YEANC113ZKTX	Transistor	

1.2. Diodes

MAIN BLOCK [E6731A]

Ref. No.	Part No.	Part Name & Description	Remarks
D201	MA151ATX	(CQ-DFX666LEN) Diode	
D601	MA723TA	Diode	
D602	LN25SRP	Diode	
D702	MA165TA	Diode	
D703	YEADRD56JB3	Diode	
D704	MA723TA	Diode	
D707	YEADRB100AT	Diode	
D708	YEADRD91MT2	Diode	
D709	MA153TX	Diode	
D710	YEADRD27M2T1	Diode	
D711	MA4051LMTA	Diode	
D715	YEADDAM3MA47	Diode	
D803	MA151ATX	Diode	
D804	YEADRD51MBT1	Diode	
D901	YEADRD51MBT1	Diode	

DISPLAY BLOCK [E8598A]

Ref. No.	Part No.	Part Name & Description	Remarks
D900	LN1271RAL	Diode	
D901	B3ABB0000026	Diode	
D902	B3ABB0000026	Diode	
D903	B3ABB0000026	Diode	
D904	B3ABB0000026	Diode	
D905	B3ABB0000026	Diode	
D906	B3ABB0000026	Diode	
D907	B3ABB0000026	Diode	
D908	B3ABB0000026	Diode	
D909	B3ABB0000026	Diode	
D910	B3ABB0000026	Diode	
D911	B3ABB0000026	Diode	
D912	B3ABB0000026	Diode	
D913	B3ABB0000026	Diode	
D914	B3ABB0000026	Diode	
D915	B3ABB0000026	Diode	
D916	B3ABB0000026	Diode	
D917	B3ABB0000026	Diode	
D918	B3ABB0000026	Diode	
D919	B3ABB0000026	Diode	
D920	B3ABB0000026	Diode	
D926	MA8056LMHTX	Diode	
D927	MA8056LMHTX	Diode	
D928	MA8056LMHTX	Diode	
D929	MA8056LMHTX	Diode	
D930		Diode	
	MA8047MTW	(CQ-DFX666LEN)	
	MA8056LMHTX	(CQ-DFX444LEN/GLEN)	

SUB BLOCK [E8497B]

Ref. No.	Part No.	Part Name & Description	Remarks
D642	LNJ306G5TUWQ	Diode	
D643	LNJ306G5TUWQ	Diode	

CD SERVO BLOCK [E8636]

Ref. No.	Part No.	Part Name & Description	Remarks
D1	YEADAN1102W	Diode	
D3	YEADAN1102W	Diode	
D201	YEAD1S8355T1	Diode	
D401	MA151WKT	Diode	
D601	YEAD1S8355T1	Diode	

1.3. Capacitors

MAIN BLOCK [E6731A]

Ref. No.	Part No.	Part Name & Description	Remarks
C51	ECA1CSA470I	Electrolytic, 47µF 16WV	
C52	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C53	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C55	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C57	YECUS1H102KX	Ceramic, 0.001µF 50WV	
C59	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C201	YECUS1H560JM	Ceramic, 56PF 50WV	
C203	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C204	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C205	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C207	YECUS1C224KX	(CQ-DFX666LEN) 0.22µF 16WV	
C208	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C209	YECUS1H562KX	Ceramic, 0.0056µF 50WV	
C210	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C211	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C212	YECUS1H560JM	Ceramic, 56PF 50WV	
C217	YECUS1C104KX	(CQ-DFX666LEN) 0.1µF 16WV	
C218	YECUS1C104KX	(CQ-DFX666LEN) 0.1µF 16WV	
C220	YECUS1H123KX	(CQ-DFX666LEN) 0.012µF 50WV	
C221	ECEA1HKA010I	(CQ-DFX666LEN) 1µF 50WV	
C223	ECEA0JKA470I	(CQ-DFX666LEN) 47µF 6.3WV	
C230	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C231	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C241	ECEA1HKA47I	Electrolytic, 0.47µF 50WV	
C242	YECUS1H122KX	Ceramic, 0.0012µF 50WV	
C244	ECEA1HKA47I	Electrolytic, 0.47µF 50WV	
C245	YECUS1H122KX	Ceramic, 0.0012µF 50WV	
C246	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C248	ECA1CDT472Y	Electrolytic, 4700µF 16WV	
C249	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C250	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C251	ECEA1HKA2R2I	Electrolytic, 2.2µF 50WV	
C252	ECEA1AKA101I	Electrolytic, 100µF 10WV	
C301	YECUS1H560JM	Ceramic, 56PF 50WV	
C303	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C304	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C305	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C307	YECUS1C224KX	(CQ-DFX666LEN) 0.22µF 16WV	
C308	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C309	YECUV2A562KX	Ceramic, 0.0056µF 100WV	
C310	ECEA0JKA331I	Electrolytic, 330µF 6.3WV	
C311	ECEA1AKA221I	Electrolytic, 220µF 10WV	
C312	YECUS1H560JM	Ceramic, 56PF 50WV	
C317	YECUS1C104KX	(CQ-DFX666LEN) 0.1µF 16WV	
C318	YECUS1C104KX	(CQ-DFX666LEN) 0.1µF 16WV	
C320	YECUS1H123KX	(CQ-DFX666LEN) 0.012µF 50WV	
C321	ECEA1HKA010I	(CQ-DFX666LEN) 1µF 50WV	
C323	ECEA0JKA470I	(CQ-DFX666LEN) 47µF 6.3WV	
C330	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C331	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C332	YECUS1H103KX	(CQ-DFX666LEN) 0.01µF 50WV	
C341	ECEA1HKA47I	Electrolytic, 0.47µF 50WV	
C342	YECUS1H122KX	Ceramic, 0.0012µF 50WV	
C344	ECEA1HKA47I	Electrolytic, 0.47µF 50WV	
C345	YECUS1H122KX	Ceramic, 0.0012µF 50WV	
C348	YECUS1E104ZF	Ceramic, 0.1µF 25WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C401	YECUS1H150JM	Ceramic, 15PF 50WV	
C402	YECUS1H150JM	Ceramic, 15PF 50WV	
C403	ECA0JSA101I	Electrolytic, 100µF 6.3WV	
C404	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C408	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C409	ECQV1H224JL2	Plastic Film, 0.22µF 50WV	
C410	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C411	ECEA1AKS221I	Electrolytic, 220µF 10WV	
C412	ECEA1AKA221I	Electrolytic, 220µF 10WV	
C413	YECUS1H101JM	Ceramic, 100PF 50WV	
C414	ECEA1AKA101I	Electrolytic, 100µF 10WV	
C601	YECUS1H220JM	Ceramic, 22PF 50WV	
C602	YECUS1H220JM	Ceramic, 22PF 50WV	
C603	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C604	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C605	ECEA0JKA331I	Electrolytic, 330µF 6.3WV	
C606	ECEA0JKA221I	Electrolytic, 220µF 6.3WV	
C607	EECS5R5H473	Electrolytic, 0.047F 5.5WV	
C608	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C610	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C611	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C612	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C613	YECUS1H221JM	Ceramic, 220PF 50WV	
C617	YECUS1H221JM	Ceramic, 220PF 50WV	
C635	YECUS1H221JM	Ceramic, 220PF 50WV	
C636	YECUS1H221JM	Ceramic, 220PF 50WV	
C637	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C650	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C660	ECEA1HKA010I	Electrolytic, 1µF 50WV	
C661	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C662	ECEA1HKA010I	Electrolytic, 1µF 50WV	
C690	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C701	ECEA1CKA101I	Electrolytic, 100µF 16WV	
C702	ECEA1HKA4R7I	Electrolytic, 4.7µF 50WV	
C703	ECEA0JKA470I	Electrolytic, 47µF 6.3WV	
C704	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C705	ECEA1HKA47I	Electrolytic, 0.47µF 50WV	
C706	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C707	ECA1AM471B	Electrolytic, 470µF 10WV	
C709	ECEA1AKS101I	Electrolytic, 100µF 10WV	
C710	ECA1CM102B	Electrolytic, 1000µF 16WV	
C711	YECUS1C224KX	Ceramic, 0.22µF 16WV	
C712	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C713	ECSFIVE475B1	Electrolytic, 4.7µF 35WV	
C714	ECEA0JKA101I	Electrolytic, 100µF 6.3WV	
C716	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C718	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C719	YECUX1C334KX	Ceramic, 0.33µF 16WV	
C720	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C721	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C722	ECEA1AKA221I	Electrolytic, 220µF 10WV	
C725	ECEA0JKA470I	Electrolytic, 47µF 6.3WV	
C727	EEUFC1A820H	Electrolytic, 82µF 10WV	
C728	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C729	ECEA1AKA221I	Electrolytic, 220µF 10WV	
C810	ECEA0JKA220I	Electrolytic, 22µF 6.3WV	
C811	YECUS1H102KX	Ceramic, 0.001µF 50WV	
C812	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C813	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C814	ECEA1HKA2R2I	Electrolytic, 2.2µF 50WV	
C901	YECUS1H270JM	Ceramic, 27PF 50WV	
C902	YECUS1H470JM	Ceramic, 47PF 50WV	
C903	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C904	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C905	YECUS1H271JM	Ceramic, 270PF 50WV	
C906	ECEA1CKA470I	Electrolytic, 47µF 16WV	
C907	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C909	YECUS1H471JM	Ceramic, 470PF 50WV	
J530	YECUV2A103KX	Ceramic, 0.01µF 100W	
J607	YECUS1H221JM	Ceramic, 220PF 50WV	
J608	YECUS1H103KX	Ceramic, 0.01µF 50WV	

DISPLAY BLOCK [E8598A]

Ref. No.	Part No.	Part Name & Description	Remarks
C905	YECUM2A683JN	Plastic Film, 0.068 μ F 100WV	
C906	YECUS1C104KX	Ceramic, 0.1 μ F 16WV	
C907	ECEV1CA220SR	Electrolytic, 22 μ F 16WV	
C910	YECUS1H102KX	Ceramic, 0.001 μ F 50WV	
C911	YECUS1C104KX	Ceramic, 0.1 μ F 16WV	
C914	YECUS1C104KX	Ceramic, 0.1 μ F 16WV	
C915	YECUS1C104KX	Ceramic, 0.1 μ F 16WV	
C920	YECUS1C104KX	Ceramic, 0.1 μ F 16WV	
C921	YECUS1C104KX	Ceramic, 0.1 μ F 16WV	
C923	YECUS1H681JM	Ceramic, 680PF 50WV	

CD SERVO BLOCK [E8636]

Ref. No.	Part No.	Part Name & Description	Remarks
C101	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C102	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C103	YECUSWJ226MA	Tantalum, 22 μ F 6.3WV	
C104	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C105	ECSH0JY475CR	Tantalum, 4.7 μ F 6.3WV	
C106	YECUZ1E273KX	Ceramic, 0.027 μ F 25WV	
C107	YECUZ1H152KX	Ceramic, 0.0015 μ F 50WV	
C108	YECUZ1H472KX	Ceramic, 0.0047 μ F 50WV	
C109	YECUZ1H102KX	Ceramic, 0.001 μ F 50WV	
C110	YECUZ1H102KX	Ceramic, 0.001 μ F 50WV	
C111	YECUSW1A106MA	Tantalum, 10 μ F 10WV	
C112	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C113	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C115	YECUZ1H102KX	Ceramic, 0.001 μ F 50WV	
C116	YECUZ1H102KX	Ceramic, 0.001 μ F 50WV	
C117	YECUS1A105KX	Ceramic, 1 μ F 10WV	
C118	YECUZ1H471KX	Ceramic, 470pF 50WV	
C119	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C120	YECUZ1H561KX	Ceramic, 560pF 50WV	
C121	YECUZ1E123KX	Ceramic, 0.012 μ F 25WV	
C122	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C133	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C145	YECUZ1A124KX	Ceramic, 0.12 μ F 10WV	
C201	YECUZ1E123KX	Ceramic, 0.012 μ F 25WV	
C203	YECUS1C334KX	Ceramic, 0.33 μ F 16WV	
C204	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C205	YECUSW1A106MA	Tantalum, 10 μ F 10WV	
C206	FIH1A474000A	Ceramic, 0.47 μ F	
C208	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C209	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C210	YECUSW1A106MA	Tantalum, 10 μ F 10WV	
C214	YECUS1C334KX	Ceramic, 0.33 μ F 16WV	
C451	FIH1A474000A	Ceramic, 0.47 μ F	
C453	YECUZ1H103KX	Ceramic, 0.01 μ F 50WV	
C601	YECUS1C334KX	Ceramic, 0.33 μ F 16WV	
C602	ECEV1CA470SF	Electrolytic, 47 μ F 16WV	
C603	YECUZ1C104KX	Ceramic, 0.1 μ F 16WV	
C605	YECUS1A105KX	Ceramic, 1 μ F 10WV	
C901	YECUS1C334KX	Ceramic, 0.33 μ F 16WV	
C903	YECUZ1C333KX	Ceramic, 0.033 μ F 16WV	

1.4. Resistors

MAIN BLOCK [E6731A]

Ref. No.	Part No.	Part Name & Description	Remarks
J501	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J502	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J503	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J504	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J506	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J507	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J508	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J509	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J511	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J512	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J513	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J516	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J518	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	

Ref. No.	Part No.	Part Name & Description	Remarks
J522	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J523	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J525	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J526	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J527	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J528	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J529	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J531	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J532	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J533	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J534	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J535	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J537	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J538	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J541	ERJ8GX0R00V	Chip, 0 Ω 1/8W	
J605	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
J609	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
J610	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
J611	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
J612	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
C615	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
R50	ERJ6GEYJ5R6	Chip, 5.6 Ω 1/10	
R52	ERJ8GEYJ101V	Chip, 100 Ω 1/8W	
R53	ERJ6GEYJ331	Chip, 330 Ω 1/10W	
R54	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
R55	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
R58	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R201	ERJ6GEYJ273	Chip, 27k Ω 1/10W	
R202	ERJ6GEYJ223	Chip, 22k Ω 1/10W	
R204	ERJ6GEYJ822	Chip, 8.2k Ω 1/10W	
R205	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R211	ERJ6GEYJ123	(CQ-DFX666LEN) 12k Ω 1/10W	
R212	ERJ6GEYJ473	(CQ-DFX666LEN) 47k Ω 1/10W	
R213	ERJ8GEYJ103V	(CQ-DFX666LEN) 10k Ω 1/8W	
R214	ERJ6GEYJ392	(CQ-DFX666LEN) 3.9k Ω 1/10W	
R215	ERJ6GEYJ272	(CQ-DFX666LEN) 2.7k Ω 1/10W	
R216	ERJ6GEYJ682	(CQ-DFX666LEN) 6.8k Ω 1/10W	
R217	ERJ6GEYJ103	(CQ-DFX666LEN) 10k Ω 1/10W	
R218	ERJ6GEYJ103	(CQ-DFX666LEN) 10k Ω 1/10W	
R225	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R226	ERJ8GEYJ333V	Chip, 33k Ω 1/8W	
R230	ERD25TJ101	Carbon, 100 Ω 1/4W	
R231	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R235	ERD25TJ101	Carbon, 100 Ω 1/4W	
R236	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R240	ERJ6GEYJ681	Chip, 680 Ω 1/10W	
R241	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R242	ERJ6GEYJ681	Chip, 680 Ω 1/10W	
R243	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R250	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R251	ERJ6GEY0R00	(CQ-DFX444LEN/GLEN) 0 Ω 1/10W	
R301	ERJ6GEYJ273	Chip, 27k Ω 1/10W	
R302	ERJ6GEYJ223	Chip, 22k Ω 1/10W	
R304	ERJ6GEYJ822	Chip, 8.2k Ω 1/10W	
R305	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R311	ERJ6GEYJ123	(CQ-DFX666LEN) 12k Ω 1/10W	
R312	ERJ8GEYJ473V	(CQ-DFX666LEN) 47k Ω 1/8W	
R313	ERJ6GEYJ103	(CQ-DFX666LEN) 10k Ω 1/10W	
R314	ERJ6GEYJ392	(CQ-DFX666LEN) 3.9k Ω 1/10W	
R315	ERJ6GEYJ272	(CQ-DFX666LEN) 2.7k Ω 1/10W	
R316	ERJ8GEYJ682V	(CQ-DFX666LEN) 6.8k Ω 1/8W	
R317	ERJ6GEYJ103	(CQ-DFX666LEN) 10k Ω 1/10W	
R318	ERJ6GEYJ103	(CQ-DFX666LEN) 10k Ω 1/10W	
R330	ERD25TJ101	Carbon, 100 Ω 1/4W	
R331	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R335	ERD25TJ101	Carbon, 100 Ω 1/4W	
R336	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R340	ERJ6GEYJ681	Chip, 680 Ω 1/10W	
R341	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R342	ERJ6GEYJ681	Chip, 680 Ω 1/10W	
R343	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R350	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R351	ERJ6GEY0R00	(CQ-DFX444LEN/GLEN) 0 Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R401	ERJ6GEYJ152	Chip, 1.5k Ω 1/10W	
R402	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R403	ERJ6GEYJ100	Chip, 10k Ω 1/10W	
R406	ERJ6GEYJ182	Chip, 1.8k Ω 1/10W	
R407	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R408	ERJ8GEYJ473V	Chip, 47k Ω 1/8W	
R409	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R600		Chip Resistor	
	ERJ6GEYJ330	(CQ-DFX666LEN) 33 Ω 1/10W	
	ERJ6GEYJ0R00	(CQ-DFX444LEN/GLEN) 0 Ω 1/10W	
R602	ERJ6GEYJ473	(CQ-DFX666LEN) 47k Ω 1/10W	
R603	ERJ6GEYJ473	(CQ-DFX444LEN/GLEN) 47k Ω 1/10W	
R605	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R607	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R608	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R609	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R610	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R611	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R614	ERJ8GEYJ681V	Chip, 680 Ω 1/8W	
R615	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R617	ERD25TJ102	Carbon, 1k Ω 1/4W	
R618	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R619	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R620	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R621	ERJ8GEYJ102V	Chip, 1k Ω 1/8W	
R622	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R623	ERJ6GEYJ184	Chip, 180k Ω 1/10W	
R628	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R629	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R630	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R631	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R632	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R633	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R639	ERJ6GEYJ184	Chip, 180k Ω 1/10W	
R642	ERJ8GEYJ103V	Chip, 10k Ω 1/8W	
R643	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R645	ERJ6GEYJ273	Chip, 27k Ω 1/10W	
R650	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R651	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R652	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R658	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R659	ERJ6GEYJ223	Chip, 22k Ω 1/10W	
R660	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R661	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R672	ERJ6GEYJ102	(CQ-DFX666LEN) 1k Ω 1/10W	
R673	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R676	ERJ6GEYJ0R00	Chip, 0 Ω 1/10W	
R677	ERDS2TJ102	Carbon, 1k Ω 1/4	
R680	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R681	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R682	ERJ6GEYJ0R00	Chip, 0 Ω 1/10W	
R686	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R690	ERJ6GEYJ184	Chip, 180k Ω 1/10W	
R691	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R692	ERJ8GEYJ104V	Chip, 100k Ω 1/8W	
R693	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R694	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R695	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R701	ERDS2FJ470	Carbon, 47 Ω 1/4W	
R703	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R704	ERJ6GEYJ274	Chip, 270k Ω 1/10W	
R705	ERJ6GEYJ433	Chip, 43k Ω 1/10W	
R706	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R707	ERD25TJ224	Carbon, 220k Ω 1/4	
R708	ERJ6GEYJ433	Chip, 43k Ω 1/10W	
R709	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R710	ERDS1FJ681	Carbon, 680 Ω 1/2W	
R711	ERDS1FJ681	Carbon, 680 Ω 1/2W	
R712	ERJ8GEYJ1R0V	Chip, 1.0 Ω 1/8W	
R714	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R715	ERJ8GEYJ473V	Chip, 47k Ω 1/8W	
R716	ERDS1FJ681	Carbon, 680 Ω 1/2W	

Ref. No.	Part No.	Part Name & Description	Remarks
R719	ERJ8GEYJ1R0V	Chip, 1.0 Ω 1/8W	
R720	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R721	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R722	ERJ8GEYJ473V	Chip, 47k Ω 1/8W	
R723	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R724	ERJ8GEYJ222V	Chip, 2.2k Ω 1/8W	
R725	ERJ6GEYJ154	Chip, 150k Ω 1/10W	
R726	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R727	ERJ6GEYJ151	Chip, 150 Ω 1/10W	
R728	ERJ6GEYJ151	Chip, 150 Ω 1/10W	
R801	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R804	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R805	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R806	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R807	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R808	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R809	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R900	ERJ6GEYJ225	Chip, 2.2M Ω 1/10W	
R902	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R903	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R904	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R905	ERJ6GEYJ334	Chip, 330k Ω 1/10W	
R906	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R908	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	

DISPLAY BLOCK [E8598A]

Ref. No.	Part No.	Part Name & Description	Remarks
R906	ERJ6GEYJ152	Chip, 1.5k Ω 1/10W	
R907	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R908	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R909	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R910	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R911	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R930	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R931	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R932	ERJ6GEYJ0R00	Chip, 0 Ω 1/10W	
R938	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	
R941	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R942	ERJ6GEYJ433	Chip, 43k Ω 1/10W	
R951	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R952	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R953	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R954	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R955	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R956	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R957	ERJ6GEYJ331	Chip, 330 Ω 1/10W	
R961	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R962	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R963	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R964	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R965	ERJ6GEYJ103	Chip, 10k Ω 1/10W	

CD SERVO BLOCK [E8636]

Ref. No.	Part No.	Part Name & Description	Remarks
J401	ERJ3GEYJ0R00V	Chip, 0 Ω 1/16W	
J429	ERJ3GEYJ0R00V	Chip, 0 Ω 1/16W	
R101	ERJ3GEYJ101V	Chip, 100 Ω 1/16W	
R102	ERJ14YJ330H	Chip, 33 Ω 1/4W	
R103	ERJ3GEYJ683V	Chip, 68k Ω 1/16W	
R104	ERJ3GEYJ683V	Chip, 68k Ω 1/16W	
R105	ERJ3GEYJ333V	Chip, 33k Ω 1/16W	
R106	ERJ3GEYJ184V	Chip, 180k Ω 1/16W	
R107	ERJ3GEYJ184V	Chip, 180k Ω 1/16W	
R108	ERJ3GEYJ823V	Chip, 82k Ω 1/16W	
R109	ERJ3GEYJ334V	Chip, 330k Ω 1/16W	
R110	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R111	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R112	ERJ3GEYJ393V	Chip, 39k Ω 1/16W	
R113	ERJ3GEYJ333V	Chip, 33k Ω 1/16W	
R114	ERJ3GEYJ153V	Chip, 15k Ω 1/16W	
R119	ERJ3GEYJ184V	Chip, 180k Ω 1/16W	
R120	ERJ3GEYJ333V	Chip, 33k Ω 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R147	ERJ3GEYJ153V	Chip, 15kΩ 1/16W	
R207	ERJ3GEYJ473V	Chip, 47kΩ 1/16W	
R208	ERJ3GEYJ473V	Chip, 47kΩ 1/16W	
R209	ERJ3GEYJ391V	Chip, 390Ω 1/16W	
R210	ERJ3GEYJ334V	Chip, 330kΩ 1/16W	
R211	ERJ3GEYJ124V	Chip, 120kΩ 1/16W	
R213	ERJ3GEYJ470V	Chip, 47Ω 1/16W	
R214	ERJ3GEYJ272V	Chip, 2.7kΩ 1/16W	
R215	ERJ3GEYJ473V	Chip, 47kΩ 1/16W	
R401	ERJ3GEYJ563V	Chip, 56kΩ 1/16W	
R402	ERJ3GEYJ563V	Chip, 56kΩ 1/16W	
R404	ERJ3GEYJ473V	Chip, 47kΩ 1/16W	
R411	ERJ3GEYJ334V	Chip, 330kΩ 1/16W	
R454	ERJ3GEYJ392V	Chip, 3.9kΩ 1/16W	
R455	ERJ3GEYJ472V	Chip, 4.7kΩ 1/16W	
R456	ERJ3GEYJ472V	Chip, 4.7kΩ 1/16W	
R461	ERJ3GEYJ823V	Chip, 82kΩ 1/16W	
R463	ERJ3GEYJ823V	Chip, 82kΩ 1/16W	
R466	ERJ3GEYJ823V	Chip, 82kΩ 1/16W	
R471	ERJ3GEYJ121V	Chip, 120Ω 1/16W	
R473	ERJ3GEYJ121V	Chip, 120Ω 1/16W	
R481	ERJ3GEYJ104V	Chip, 100kΩ 1/16W	
R601	ERJ3GEYJ123V	Chip, 12kΩ 1/16W	
R602	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R603	ERJ3GEYJ273V	Chip, 27kΩ 1/16W	
R604	ERJ3GEYJ124V	Chip, 120kΩ 1/16W	
R605	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R606	ERJ3GEYJ822V	Chip, 8.2kΩ 1/16W	
R607	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R608	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R609	ERJ3GEYJ472V	Chip, 4.7kΩ 1/16W	
R610	ERJ3GEYJ472V	Chip, 4.7kΩ 1/16W	
R613	ERJ3GEYJ122V	Chip, 1.2kΩ 1/16W	
R901	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R902	ERJ3GEYJ333V	Chip, 33kΩ 1/16W	
R903	ERJ3GEYJ122V	Chip, 1.2kΩ 1/16W	

1.5. Connectors

MAIN BLOCK [E6731A]			
Ref. No.	Part No.	Part Name & Description	Remarks
CJ620	K9ZZ00000176	Connector, 14P FFC	
CN251	YEA012709	Connector, RCA 4P	
CN300	YEA02166	Connector, RCA 4P	
CN601	YEA0115MX	Connector, 15P	
CN602	YEA0104MX	Connector, 7P	
CN603	YEA0104MX	Connector, 4P	
CN620	YEA012763	Connector, 14P	
CN680	YEA012307	Connector, 8P DIN	
CN701	YEA012748	Connector, 16P	

DISPLAY BLOCK [E8598A]			
Ref. No.	Part No.	Part Name & Description	Remarks
CN901	YEA012760	Connector, 14P	

SUB BLOCK [E8497B]			
Ref. No.	Part No.	Part Name & Description	Remarks
CJ640	YEA0115MPA	Connector, 15P	
CJ642	YEA0104MPA	Connector, 4P	
CP641	YEA012761	Connector, 14P	

CD SERVO BLOCK [E8636]			
Ref. No.	Part No.	Part Name & Description	Remarks
CN101	YEA0115MR2E	Connector, 15P	
CN402	K1MN14B00028	Connector, 14P	
CN901	K1MN05B00010	Connector, 5P	
CN902	K1MN05B00009	Connector, 5P	

1.6. Electric Parts

SWITCHES			
Ref. No.	Part No.	Part Name & Description	Remarks
SW2	ESE102MH2	Switch	
SW4	YEAS09275	Switch	
SW602	YEAS08042	Switch	
SW610	YEAS09267	Switch	
SW901	YEAS09312	Switch	
SW902	YEAS09312	Switch	
SW903	YEAS09312	Switch	
SW904	YEAS09312	Switch	
SW905	YEAS09312	Switch	
SW906	YEAS09312	Switch	
SW907	YEAS09312	Switch	
SW908	YEAS09312	Switch	
SW909	YEAS09312	Switch	
SW910	YEAS09312	Switch	
SW911	YEAS09312	Switch	
SW912	YEAS09312	Switch	
SW913	YEAS09312	Switch	
SW914	YEAS09312	Switch	
SW915	YEAS09312	Switch	
SW916	YEAS09312	Switch	
SW917	YEAS09312	Switch	
SW918	YEAS09312	Switch	
SW919	YEAS09312	Switch	
SW920	YEAS09312	Switch	
SW921	YEAS09312	Switch	
SW922	YEAS09312	Switch	

LCD			
Ref. No.	Part No.	Part Name & Description	Remarks
LCD901		LCD	
	L5ACDLC00007	(CQ-DFX666LEN)	
	EDD113YX1A4P	(CQ-DFX444LEN/GLEN)	

COILS			
Ref. No.	Part No.	Part Name & Description	Remarks
L50	YELT02C330KT	Coil	
L400	YELT02C101KT	Coil	
L600	YELT02C470KT	Coil	
L601	YELT02C101KT	Coil	
L630	YELT02C8R2KT	Coil	
L702	YETQ026F143	Coil	
L703	ELEAT330KA02	Coil	
L800	YELT02C101KT	Coil	
L900	YELT02C330KT	Coil	
L901	YRIT216825TG	Coil	
L902	YELTD75F101T	Coil	
L903	YELT02C330KT	Coil	

CRYSTALS			
Ref. No.	Part No.	Part Name & Description	Remarks
XL201	H2D169500005	Crystal	
XL400	YEXL49U072TA	Crystal	
XL451	YEXLSTCC419T	Crystal	
XL600	YEXL49U0419T	Crystal	
XL900	YEXL49U0433T	Crystal	

LAMPS			
Ref. No.	Part No.	Part Name & Description	Remarks
Z50	YEAL02007T	Neon Tube	
CFL901	A2CA00000007	Display Tube	

THERMISTOR			
Ref. No.	Part No.	Part Name & Description	Remarks
PT701	YERT7AR4R7MT	Thermistor	

1.7. Accessories

PRINTING

Ref. No.	Part No.	Part Name & Description	Remarks
	YGF2B2962	Instruction Book	

INSTALLATION PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
	CR2025/1F	Battery	
	YEP9BS1111	Mounting Parts Kit	
	YEAJ02793	Power Cord w/Plug	
	YEMA33144	Antenna Accessory	
	YEFAL31302	Detachable Unit Cover	
	YEFX0214198	Mounting Collar	
	YEFX9992013	Remote Controller	

1.8. Mechanical Parts

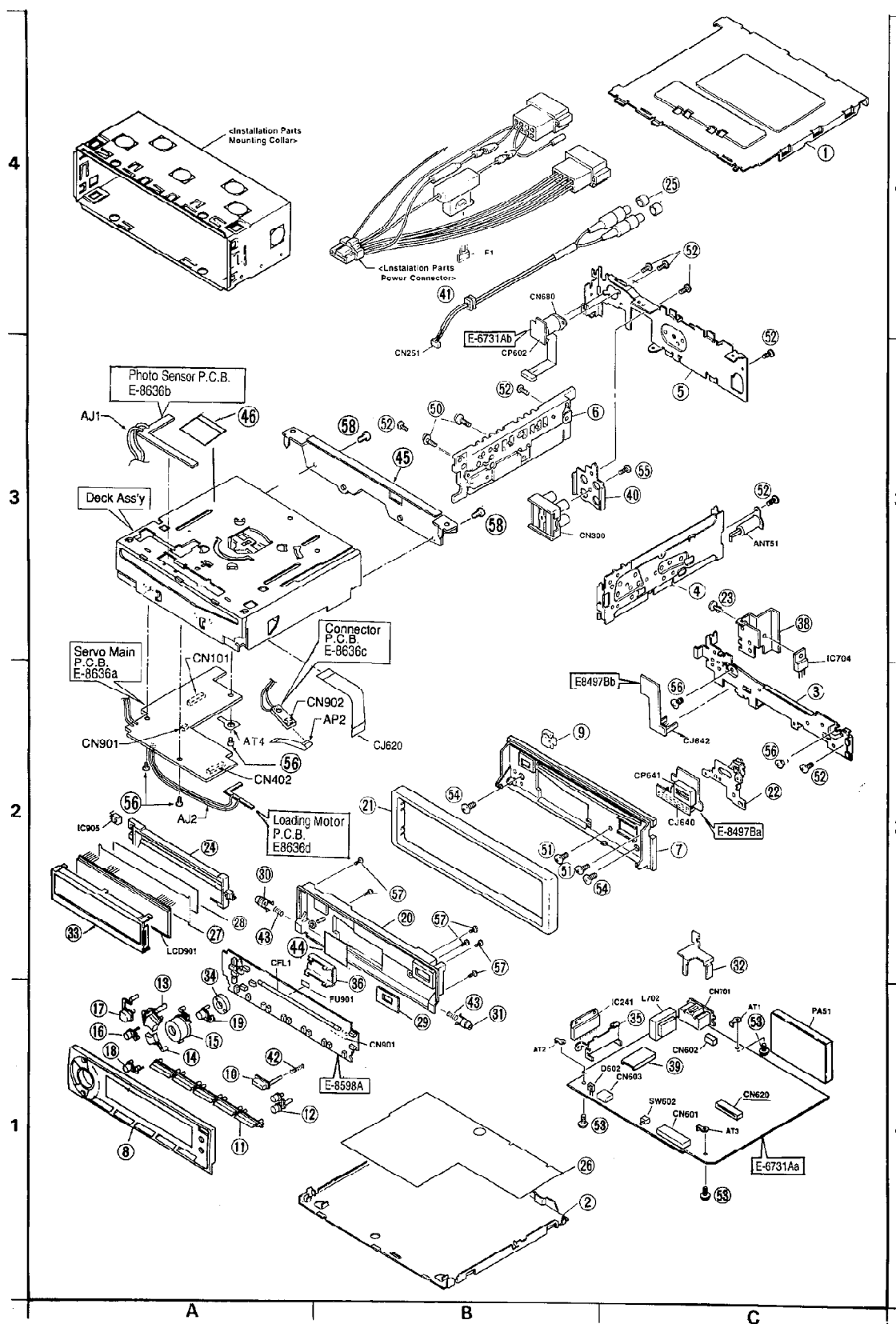
MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
F1 △	YEAFO2015	Fuse, 15A	
AJ1	YGAJ071284	Cord w/Plug	
AJ2	YGAJ071285	Cord w/Plug	
ANT51	YEAAL0090	Antenna Receptacle	
AP2	YEA2711	Flexible P.C.B.	
AT1-3	K4ZZ01000048	Terminal	
AT4	YEAT05014	Terminal	
1	YEFA031359D	Upper Cover	(4-C)
2	YEFA05594B	Bottom Cover	(1-B)
3	YEP9FX088	Front Chassis Ass'y	(2-C)
4	YEFA09505	Side Plate	(3-C)
5	YEFA08462AK	Rear Plate	(3-C)
6	YEFF01922	Heat Sink	(3-B)
7	YEF0026243	Escucheon Ass'y	(2-B)
8		Escucheon Ass'y, Detachable	(1-A)
	YEF0026157	(CQ-DFX666LEN)	
	YEF0026159	(CQ-DFX444LEN)	
	YEF0026241	(CQ-DFX444GLEN)	
9	YEFEL35147	Button, EJECT	(2-B)
10	YEFEL35141	Button, OPEN	(1-A)
11		Button, PRESET/LOUD	(1-A)
	YEFEL35148	(CQ-DFX666LEN)	
	YEFEL35149	(CQ-DFX444LEN/GLEN)	
12	YEFEL35146	Button, . / D	(1-A)
13	YEFEL35137	Button, VOL UP	(1-A)
14	YEFEL35138A	Button, VOL DOWN	(1-A)
15	YEFEL35140A	Button, MODE/BAND	(1-A)
16	YEFEL35142	Button, ATT	(1-A)
17	YEFEL35143	Button, SEL	(1-A)
18	YEFEL35144	Button, PWR	(1-A)
19	YEFEL35139	Button, SDM	(1-A)
20	YEFAL31357	Cover, Detachable	(2-B)
21	YEF005558A	Trim Plate	(2-B)
22	YEP9FX069	Hook Bracket Ass'y	(2-C)
23	YEFJ05030	Color Rivet	(3-C)
24	YEFK06791A	Holder, LCD	(2-A)
25	YEFRO4187	Lead Cap	(4-C)
26	YEFV011813	Insulator	(1-B)
27		Optical Shade, LCD	(2-A)
	YEFV021552	(CQ-DFX666LEN)	
	YEFV021551	(CQ-DFX444LEN)	
	YEFV021581	(CQ-DFX444GLEN)	
28	YEFV021528	(CQ-DFX444GLEN) Optical Shade	
29	YEFV011891	Insulator	(1-B)
30	YEFW04156	Shaft Collar	(2-A)
31	YEFW04157	Shaft Collar	(1-B)
32	YEFX0214422	Bracket, CN701	(2-C)
33	YEFX0214417	Bracket, LCD	(2-A)
34	YEFX0011815	Transparent Plate	(1-A)
35	YEFX0213945B	Bracket, IC241	(1-C)
36	YEFX0214418	Bracket	(2-B)
38	YEFX0214423	Bracket, IC704	(3-C)

Ref. No.	Part No.	Part Name & Description	Remarks
39	YEFX0214168	Bracket, IC702	(1-C)
40	YEFX0213650	Bracket, RCA	(3-C)
41	YEFX007380	Cord Clamper	(4-B)
42	YEFX0052153	Spring	(1-A)
43	YEFX0052253	Spring	(2-A) (1-B)
44	YEFV03457	Magnetic Shield	(2-B)
45	YEFX0214700	Bracket, Deck	(3-B)
46	YEFM03982	Laser Seal	(3-A)
50	YEJS06092	Screw, 3mm * 10mm	
51	YEJS03020	Screw, 2mm * 4mm	
52	XTB3+6FFX	Tapping Screw, 3mm * 6mm	
53	YEJT03009	screw, 3mm * 8mm	
54	YEJT03156	Tapping Screw, 2.6mm * 4mm	
55	XTB3+8GFX	Screw, 3mm * 8mm	
56	XYN2+J4FX	screw, 2mm * 4mm	
57	XTN2+8GFX	Tapping Screw, 2mm * 8mm	
58	YEJT03247	Tapping Screw,	

EXPLODED VIEW (Unit)

Numbers in ○ are indicated REF.NO. in the REPLACEMENT PARTS LIST



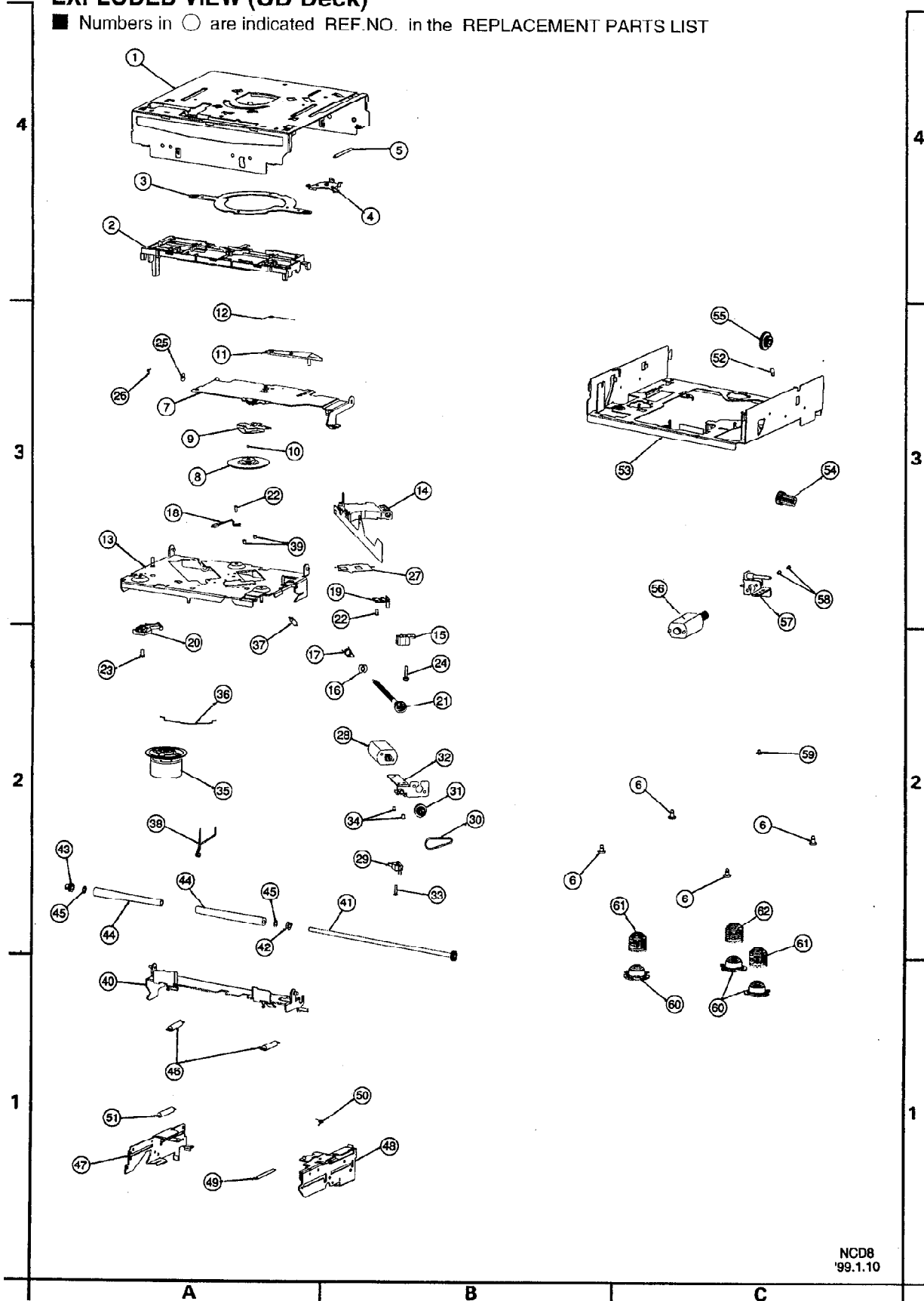
2 CD PLAYER PARTS

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
1	YGFA011781	Upper Chassis	(4-A)
2	YGFX236153	Disk Guide	(4-A)
3	YGFX0462017	Link Lever	(4-A)
4	YGFX0462018	Detection Lever (2)	(4-B)
5	YGFX0052357	Detection Lever (2) Spring	(4-B)
6	YEJT03131	Tapping Screw, 2.6 mm* 5mm	(2-C) (2-B)
7	YGFX249461	Clamp Arm	(3-A)
8	YGFX007640	Clamper	(3-A)
9	YGFX0052363	Clamper Spring Plate	(3-A)
10	YEFX999957	Dall Bearing	(3-A)
11	YGFX0462013	Detection Lever (1)	(3-A)
12	YGFX0052352	Detection Lever (1) Spring	(3-A)
13	YGFA011795	Suspension Chassis Ass'y	(3-A)
14	YEP0FX3100	Optical Pick-up Ass'y	(3-B)
15	YEFW04150	Feed Screw Housing A	(2-B)
16	YEFW04137A	Feed Screw Housing B	(2-B)
17	YGFX0052386	Thrust Adjusting Spring	(2-B)
18	YEFX236144B	Traverse Guide	(3-A)
19	YGFX9992027	Feed Screw Carrier	(3-B)
20	YEFX9991458A	FPC Holder	(2-A)
21	YGT03240	Traverse Gear Ass'y	(2-B)
22	YELJS02037	Screw, (Pick-up)	(3-A) (3-B)
23	XYN2+C5FX	Screw, (FPC) 2mm * 5mm	(2-A)
24	XYN2+J10FX	Screw, (Housing) 2mm * 10m	(2-B)
25	YEFX0051590	Spring Washer	(3-A)
26	XUC15V	Retaining Ring, 1.5mm	(3-A)
27	YEFX9991806A	Sealed Plate	(3-B)
28	YGP0FX3503	Traverse Motor Ass'y	(2-B)
29	YEAS23151A	Inner Switch	(2-B)
30	YEFR03080	Rubber Belt	(2-B)
31	YEFX026124A	Idler Pulley	(2-B)
32	YGFX018611	Motor Bracket Ass'y	(2-B)
33	YELJS02018FZ	Screw, (SW)	(2-B)
34	XQN2+A25FX	Screw, 2mm * 25mm	(2-B)
35	YGP0FX3529	Spindle Motor Ass'y	(2-A)
36	YEFX0051991C	Spring (Motor)	(2-A)
37	YGFX0052353	Clamper Spring	(2-A)
38	YGAJ071286	Motor Cable	(2-A)
39	XQN17+A25FX	Screw, 1.7mm * 25mm	(3-A)
40	YGFX0462019	Feeder Arm Ass'y	(1-A)
41	YGP0FX3507	Roller Gear Ass'y	(2-B)
42	YEFW04144	Roller Shaft Collar (1)	(2-A)
43	YEFW04138	Roller Shaft Collar (2)	(2-A)
44	YEFX218282	Rubber Roller	(2-A)
45	YELJW04128	Washer	(2-A)
46	YGFX0052362	Spring (Feeder Arm)	(1-A)
47	YGFX0462015	Suspension Lock Plate (L)	(1-A)
48	YGP0FX3504	Suspension Lock Plate (R) Ass'y	(1-B)
49	YGFX0052355	Spring (Rack Gear)	(1-A)
50	YGFX0052356	Spring (Rack Lock Lever)	(1-B)
51	YGFX0052360	Spring (Suspension Lock Plate L)	(1-A)
52	YGFX0052361	Spring (Lock Plate)	(3-C)
53	YGFA011779	Bottom Chassis Ass'y	(3-C)
54	YGFX003940	Driving Gear (1)	(3-C)
55	YGFX003941	Driving Gear (2)	(3-C)
56	YGP0FX3506	Loding Motor Ass'y	(3-C)
57	YGFX018605	Loding Motor Bracket Ass'y	(3-C)
58	XQN2+A25FX	Screw, (Motor) 2mm * 25mm	(3-C)
59	YELJS06188	Screw	(2-C)
60	YRFS04693	Oil Dumper	(1-C)
61	YGFX0052358	Suspension Spring (A)	(2-C)
62	YGFX0052359	Suspension Spring (B)	(2-C)

EXPLODED VIEW (CD Deck)

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